

**COMPETITION ENFORCEMENT AND EFFICIENCY IN RELEVANT
MARKETS: A CASE OF TEA AGROMARKETS IN TANZANIA**

ALLAN SYRIL MLULLA

**A THESIS SUBMITTED IN FULFILMENT OF THE REQUIREMENTS FOR
THE DEGREE OF DOCTOR OF PHILOSOPHY OF THE OPEN
UNIVERSITY OF TANZANIA**

2016

CERTIFICATION

The undersigned certify that they have read and hereby recommend for acceptance by Senate of The Open University of Tanzania a Thesis titled “**Competition Enforcement and Efficiency in Relevant Markets: A Case of Tea Agro Markets in Tanzania**” in fulfillment of the requirements for the Degree of Doctor of Philosophy of The Open University of Tanzania.

.....

Prof. Deus Ngaruko

(Supervisor)

.....

Date

.....

Dr. Khatibu Kazungu

(Supervisor)

.....

Date

COPYRIGHT

No part of this thesis may be reproduced, stored in any retrieval system, or transmitted in any form by any means, electronic, mechanical, photocopying, recording or otherwise without prior written permission of the author or The Open University of Tanzania in that behalf.

DECLARATION

I, **Allan Syril Mulla**, do hereby declare that this thesis for the degree of Doctor of Philosophy is my own original work and it has not been submitted and will not be presented to any other university or any other institution of higher education for a similar award.

.....

Signature

.....

Date

DEDICATION

This thesis is dedicated to my wife Sylvia from whom I have learnt the virtues of prayers and hard work and my sons Allan Junior and Alvin from whom I have drawn inspiration for this work at my midlife age.

ACKNOWLEDGEMENTS

I am indebted to my supervisors Professor Deus Dominic Ngaruko and Dr. Khatibu Kazungu of the Open University of Tanzania whose encouragement, enthusiasm and comments have resulted to the success of this thesis.

I am equally indebted to Mr. Azizi Mwakilembe, Mr. Robert Charles and Ms. Rose who assisted me with data collection during field work; as such they have made this thesis a reality. Special thanks go to Mr. Fahari Marwa of the Tanzania Tea Board for his support and cooperation in terms of information provision.

Last but not least, I am indebted to my family; my wife Sylvia and my sons Allan Junior and Alvin who have always been a source of inspiration in all that I do in life; from them all, I have learnt that working hard is a virtue.

Above all, I thank God who made it possible for me to start and complete PhD and other studies against all odds.

ABSTRACT

The study investigated the linkage between sectoral and competition laws in providing for plausible competition enforcement models in the tea sector using the CAF. Field survey was conducted on green tea leaves farmers and buyers in Rungwe, Mufindi and Muheza. Specific objectives were to (i) assess the adequacy of provisions of the legal and regulatory framework in providing for pro competition markets (ii) determine gross margins and examine their variations (iii) assess and compare the performance (GM) (iv) identify the factors affecting pro competition functioning of the identified relevant markets. Data analysis using SPSS entailed frequencies, means and cross tabulations, indexing, HHI, ANOVA, Chi square and t-test were also used to test robustness of the statistics. A GLS multiple regression model was used to identify factors influencing farmers' GM. Results reveal that there is need for economic regulation and that the current legal provisions are inadequate to provide for pro competition markets. The identified relevant markets are the buying and selling of green tea leaves in (i) Rungwe (ii) Mufindi and (iii) Muheza. Results show existence of abuse of dominance and unnotified mergers in Rungwe, anti-competitive agreements in Muheza and Mufindi, barriers to entry and vested interests in all the three. Results also showed that several factors do affect pro competition functioning of the three markets. It was recommended that there should developed comprehensive legal and regulatory framework to provide for economic regulation in the three markets. The identified anti-competitive issues should be pursued by the FCC by way of enforcement whereas non-enforcement issues should be pursued as matters of competition advocacy.

TABLE OF CONTENTS

CERTIFICATION	ii
COPYRIGHT.....	iii
DECLARATION	iv
DEDICATION	v
ACKNOWLEDGEMENTS	vi
ABSTRACT	vii
LIST OF TABLES	xvi
LIST OF FIGURES	xix
LIST OF APPENDICES.....	xx
LIST OF ABBREVIATIONS.....	xxi
CHAPTER ONE	1
BACKGROUND INFORMATION	1
1.1 Introduction.....	1
1.2 Statement of the Research Problem and Justification	7
1.3 Research Objectives	8
1.3.1 Overall Objective	8
1.3.2 Specific Objectives.....	8
1.3.3 Research Hypotheses.....	8
1.3.4 Research Question.....	9
1.4 Scope and Limitations of the Study	9
1.5 Significance of the Study.....	10
1.6 Organisation of the Thesis	11

CHAPTER TWO	12
LITERATURE REVIEW	12
2.1 Chapter Overview	12
2.2 Definition of Key Competition Terms	12
2.2.1 Competition/Antitrust.....	12
2.2.2 Antitrust/Competition Policy.....	13
2.2.3 Competition Law.....	14
2.2.4 Relevant Markets	14
2.3 Theoretical Framework	15
2.3.1 Theoretical Aspects of Market Structures.....	15
2.3.2 Marketing Channels	16
2.3.3 Market Exchange Types in a Marketing Channel.....	17
2.3.4 Institutions, Organizations, Transaction Costs and the Market.....	18
2.3.5 Social Capital, Asymmetry Information and Moral Hazards	20
2.4 Theoretical Review of Competition Perspectives	21
2.4.1 Classical Perspective to Competition.....	21
2.4.2 The Neo Classical Perspective to Competition.....	23
2.4.3 The Chicago School's Ten Propositions	25
2.5 The Substance of Competition Economics.....	27
2.5.1 Market Power and Consumer Welfare in Competition Economics.....	28
2.5.1.1 Market Power.....	28
2.5.1.2 Consumers' Surplus, Producers' Surplus and Total Welfare	29
2.5.1.3 Competition Policy and the Social Cost of Monopoly.....	33
2.5.1.4 The Deadweight Loss Caused by Monopoly.....	34

2.5.1.5	Rent Seeking	35
2.5.1.6	Lost Competitor Investment	36
2.5.1.7	Monopsony: Definition, Prices, Output Effects and Policy Implications	36
2.5.2	Benefits of and Limitations of Competition	39
2.5.3	Market Regulation.....	40
2.5.3.1	Economic Regulation	40
2.5.3.2	Technical Regulation.....	41
2.6	Relationships between Competition Law and Economic Regulation	42
2.6.1	Regulation can Contradict Competition Policy	42
2.6.2	Regulation can Replace Competition Policy	42
2.6.3	Regulation can Reproduce Competition Law and Policy.....	43
2.6.4	Regulation can use Competition Institutions' Methods	43
2.7	Review of Methodologies in Competition Assessments	44
2.7.1	Structure, Conduct and Performance Model	44
2.7.1.1	Structure.....	44
2.7.1.2	Conduct.....	45
2.7.1.3	Performance	45
2.7.1.4	Government Policy.....	45
2.8	The Research Model: Competition Assessment Framework.....	46
2.8.1	Identify the Relevant Markets.....	47
2.8.2	Identify the Existing Competitors	47
2.8.3	Examine the Market Structure	47
2.8.4	Barriers to Entry.....	48
2.8.5	Government Policies or Institutions Limiting Competition	49

2.8.5.1	State-owned Enterprises	49
2.8.5.2	Public Procurement	50
2.8.5.3	Regulated Sectors.....	50
2.8.5.4	Trade Policy and Industrial Policy.....	50
2.8.5.5	Unequal Enforcement of Laws and Regulations	50
2.8.5.6	Vested Interests.....	51
2.8.6	Anti-Competitive Conduct	51
2.8.6.1	Horizontal Issues.....	51
2.8.6.2	Mergers.....	52
2.8.6.3	Vertical Integration Issues	52
2.8.7	Draw Conclusions	52
2.9	Review of Empirical Competition Literature	52
2.10	The Conceptual Framework	60
	CHAPTER THREE	63
	LEGAL FRAMEWORK GOVERNING COMPETITION IN THE	
	TANZANIAN TEA SECTOR	63
3.1	Chapter Overview	63
3.2	Theoretical Review of Competition Law	63
3.3	Anti-Competitive Agreement	65
3.1.1	Economics of Cartels.....	65
3.1.2	Legal Aspects of Cartels.....	67
3.2	Abuse of Dominant Position/ Market Power.....	68
3.2.1	Exclusive Dealing	70
3.2.1.1	Economics of Exclusive Dealing	71

3.2.1.2	Legal Aspects of Exclusive Dealing	72
3.2.3	Refusal to Deal.....	74
3.3	Mergers.....	75
3.4	Provision of the FCA in Relation to Competition in the Tea Sector	75
3.4.1	The Agreements' Exemption Test	75
3.4.2	The Merger Test.....	78
3.4.2.1	Fair Competition Commission (Threshold for Notification of a Merger) Order, 2007	79
3.4.2.2	The Fair Competition Commission Procedure Rules, 2013	79
3.4.3	Review of Provision for Inconsistency of the FCC with Other Laws.....	79
3.4.4	Provision of Selected Sector Specific Provision on Competition Matters...81	
3.4.4.1	The Energy and Water Utilities Regulatory Authority Act Inconsistency with the FCA.....	82
3.4.4.2	The Petroleum Act	83
3.5	Provisions of the Tea Industry Legislative Framework in Relation to Market Competition	84
3.5.1	The Tea Industry Act No. 3 of 1997	84
3.5.2	The Tea Regulations, 2010	85
	CHAPTER FOUR.....	93
	RESEARCH METHODOLOGY	93
4.1	Chapter Overview.....	93
4.2	Research Design.....	93
4.3	Data Collection.....	93
4.3.1	Types of Data	94

4.3.1.1 Secondary Data	94
4.3.1.2 Primary Data	94
4.3.2 Sampling Methods.....	95
4.3.3 Questionnaire Design and Administration.....	96
4.3.4 Key Informant Interviews	96
4.4 Data Analysis	97
4.4.1 Descriptive Analyses	97
4.4.2 Content Analysis	97
4.4.3 Triangulation.....	97
4.4.4 Benchmarking	98
4.4.5 Competition Harm Index	99
4.4.6 The Chi-Square Statistic	100
4.4.7 Student's t-test	100
4.4.8 Gross Margin Analysis	101
4.4.9 Analysis of Variance	102
4.4.10 Small but Significant and Non-transitory Increase in Price Test.....	103
4.4.11 Herfindahl-Hirschman Index	104
4.4.12 Cost-Benefit Analysis.....	105
4.4.13 Regression Analysis	106
CHAPTER FIVE	113
RESULTS AND DISCUSSION.....	113
5.1 Chapter Overview	113
5.1.1 Description of the Tea Sector	113
5.1.2 Description of Market Participants in the Study Areas.....	114

5.1.3	Socio-economic Characteristics of the Farmers	116
5.2	The Legal and Regulatory Framework in the Identified Relevant Markets of the Tea Sector.....	117
5.2.1	Legal Framework and its Resulting Value Chain in the Identified Relevant Markets	118
5.2.1.1	Key Market Players in the Value Chain.....	123
5.2.2	The Discovery of Indicative and Actual Green Tea Leaves Prices	124
5.2.3	The Missing Link between the FCA and the TIA on Provision of Adequate Oversight.....	129
5.3	Relevant Markets and Anti-Competitive Conducts in the Identified Relevant Markets	135
5.3.1	Identified Relevant Markets	135
5.3.1.1	The Product Market.....	136
5.3.1.2	The Geographical Market.....	136
5.3.1.3	SNNIP Test Results.....	136
5.3.2	Identified Relevant Markets	138
5.4	Anti-competitive Conducts in the Identified Relevant Markets	139
5.4.1	Identified Existing Competitors.....	139
5.4.1	Examination of the Relevant Markets' Concentration and Structure	142
5.4.2	Barriers to Entry.....	143
5.4.3	Unequal Enforcement of Laws and Regulations in the Identified Relevant Markets	144
5.4.4	Vested Interests.....	146
5.4.5	Anti-Competitive Conduct	147

5.4.5.1	Abuse of Dominance	147
5.4.5.2	Collusion and Cartels	151
5.4.5.3	Mergers.....	155
5.4.6	Regulated Sector	159
5.4.6.1	The Plausible Competition Enforcement Model.....	159
5.4.7	Vertical Integration Issues	162
5.4.8	Competition Issues Profile in the Relevant Market	164
5.4.9	Draw Conclusions	164
5.5	Gross Margins in the Identified Relevant Markets	165
5.6	Factors Affecting Pro Competition Functioning of the Relevant Markets Assessed in the Tanzanian Tea Sector	166
CHAPTER SIX.....		171
CONCLUSION AND RECOMMENDATIONS.....		171
6.1	Chapter Overview	171
6.2	Conclusion	171
6.3	Recommendations	173
6.3.1	Policy Recommendations	173
6.3.2	Recommendations for Further Studies.....	175
REFERENCES		176
APPENDICES.....		185

LIST OF TABLES

Table 1: Market Characteristics in Different forms of Markets.....	15
Table 2: Differences between Competition Policy and Sector-specific Regulation Approaches	43
Table 3: Compatibility of the FCA with the Model Law	64
Table 4: Impact of Market Factors on Cartel Sustainability.....	66
Table 5: Competition Harm Index.....	99
Table 6: Description of HHI Thresholds and Effects to Competition.....	105
Table 7: Distribution of Farmers and Cultivated Area by Tea Growing Districts	113
Table 8: Results of Distribution of Farmers by Age in the Identified Relevant Markets.....	114
Table 9: Results on Distribution of Farmers by Education Level.....	115
Table 10: Results on Distribution of Farmers by Key Social Economic Characteristics	116
Table 11: Results for Responses on Farmer’s Conduct in Changing Buyers by Districts	116
Table 12: Distance and Time taken from the Farm to Buying Centers.....	117
Table 13: Results on the Impact of Market Factors on Cartel Sustainability in the Relevant Markets	125
Table 14: Results for Responses on Allowance to Sell Outside Districts by Districts	136

Table 15: Response on the Price that Farmer would sell outside Tea Growing Districts	137
Table 16: Response on the Actual Price Paid to the Farmer in 2013/2014	138
Table 17: Production Based Market Shares in the Identified Relevant Markets	139
Table 18: Market Concentration in the Relevant Markets	142
Table 19: Results for Response on Buyers Owning Processing Plant by Districts	143
Table 20: Distribution of Farmers' Response on Kickback.....	150
Table 21: Comparison between Indicative and Actual Prices in Rungwe 2011 - 2015	151
Table 22: Comparison between Indicative and Actual Prices in Muheza 2011 - 2015	151
Table 23: Comparison between Indicative and Actual Prices in Mufindi 2011 - 2015	152
Table 24: Results (t-test) for Farmers' Gross Margins in Mufindi and Muheza Relevant Markets	154
Table 25: Trend of Buying Companies in the Three Identified Relevant Markets in 2006 – 2015	158
Table 26: Farmers Response on the Driving Force Actor	162
Table 27: Distribution of Sources of Information in Setting Price in the Relevant Markets	163
Table 28: Distribution of Factors Considered in Setting Price in the Relevant Markets	163
Table 29: Distribution of Competition Issues in the Relevant Markets.....	164

Table 30: Results for Comparison of Relevant Markets' Gross Margins.....	165
Table 31: ANOVA Results for Gross Margins' Differences in the Relevant Markets	166
Table 32: Regression (GLS) Results on Factors Affecting Pro Competition Functioning of the Relevant Markets.....	166

LIST OF FIGURES

Figure 1: Vertical Integration Spectrum	17
Figure 2: Consumers' Surplus and Producers' Surplus	30
Figure 3: Monopolistic Vs Competitive Market Scenarios.....	31
Figure 4: The Deadweight Loss of Monopoly	34
Figure 5: Price and Output Determination by a Monopsonist	37
Figure 6: Conceptual Framework	62
Figure 7: Green Tea Leaf Value Chain in Tanzania.....	122
Figure 8: Smallholder Tea Grower's Farm in Muheza.....	141
Figure 9: Proposed Market Enforcement Model.....	161

LIST OF APPENDICES

Appendix 1: Producer Questionnaire.....185

Appendix 2: Buyers Questionnaire.....197

Appendix 3: Significance of Cross Tabulation on Variables206

LIST OF ABBREVIATIONS

ABA	American Bar Association
ANOVA	Analysis of Variance
AOD	Abuse of Dominance
BBTC	Bombay Burmah Trading Company
CAF	Competition Assessment Frame work
CoP	Cost of Production
CTC	Competition and Tariffs Commission
CUTS	Consumer Unity and Trust Society
DALDO	District Agriculture and Livestock Officer
DFID	Department for International Development
DMT	Dry Mouth Tea
EU	European Union
EUTCO	East Usambara Tea Company
EWURA	Energy and Water Utilities Regulatory Authority
FCA	Fair Competition Act
FCC	Fair Competition Commission
FCT	Fair Competition Tribunal
FIAS	Foreign Investment Advisory Services
GLS	Generalized Least Square
GM	Gross Margin
HHI	Herfindahl – Hirschman Index
ICN	International Competition Network

MeTL	Mohamed Enterprises Tanzania Limited
MTC	Mufindi Tea and Coffee Limited
OECD	Organization for Economic Co-operation and Development
RMB	Rand Merchant Bank
RSTGA	Rungwe Small Holders Tea Growers Association
RUTECO	Rungwe Tea Cooperative
SPSS	Statistical Package for Social Sciences
SSNIP	Small but Significant and Non transitory Increase in Price
SUMATRA	Surface and Marine Transport Regulatory Authority
TAOMAC	Tanzania Oil Marketing Companies
TATEPA	Tanzania Tea Packers
TBT	Tea Board of Tanzania
TCAA	Tanzania Civil Aviation Authority
TCRA	Tanzania Communications Regulatory Authority
TIA	Tea Industry Act
TR	Total Revenue
TRA	Tanzania Revue Authority
TSHTDA	Tanzania Small Holders Tea Development Agency
TTA	Tanzania Tea Authority
TTB	Tanzania Tea Board
TTEL	Tukuyu Tea Estate Limited
TVC	Total Variable Cost
TZS	Tanzania Shilling
UNCTAD	United Nations Conference on Trade and Development

USA	United States of America
UTTL	Uniliver Tea Tanzania Limited
WATCO	Wakulima Tea Company Ltd

CHAPTER ONE

BACKGROUND INFORMATION

1.1 Introduction

In Tanzania agricultural markets have undergone a series of reforms that can be linked to major political, social, policy and economic changes that the country experienced. Traditionally, major cash crops have been under management of crop boards, which centrally control development of the respective crop. Farmers on the other hand have been collaborators of the crop boards in their various organized forms of cooperatives as second key market player. The buyers of crops have equally been important third player in these markets; as such they have been pivotal in description of structure and conduct in these markets.

Following Tanzania's adoption of market economy approach in economic management during mid 1980s; there were changes in the multisectoral regulatory structures that saw a repeal of the Price Control Act of 1973 in 1993 and enactment of the Fair Trade Practices Act of 1994 to provide for competition and regulation issues in the economy. This law was hardly implemented as it had flaws which made its implementation either shoddy or impossible (FCC, 2008).

The Fair Trade Practices Act, 1994 was amended in 2001 and became known as Fair Competition Act, 1994. Eventually the Fair Competition Act, 1994 was repealed and replaced by the Fair Competition Act No. 8 of 2003 (FCA) which among other issues it established the Fair Competition Commission which is charged with the responsibility to promote and protect competition in trade and commerce and

protection of consumers from unfair and misleading market conduct in the economy. Agro markets fall squarely in the ambit of the FCA.

In the agriculture sector, these policy and legislation reforms changed both conduct and structure of most of its markets. Nevertheless, these reforms did not always bring about the desired effect partly because of the following:

- (i) The policy and legislation changes did not auger well with the philosophy of market economy, thus making their implementation either too difficult or impossible.
- (ii) There still exist policies and legislation that have not been fully reviewed in line with the spirit of market economy, yet they are expected to complement functioning of market economy.
- (iii) The foregoing is made worse with the fact that understanding and practice of the market economy principle including the discipline of competition remains generally low in the economy (FCC, 2008).

A combination of the factors in (i) to (iii) above remain the bottleneck to optimal functioning of most markets in Tanzania including the agriculture related particularly the Tea agro markets which are the subject of this study. As a result of incomplete evolution of a sound competition regime in Tanzania, agricultural markets have suffered from all forms of anticompetitive behaviors of firms in relevant markets i.e. anticompetitive mergers and acquisitions, anticompetitive agreements and abuse of market power by dominant firms in markets. Agro markets especially of traditional cash crops are facing market coordination failures resulting to low productivity,

declining exports, low farm gate prices and failure to meet quality standards in the world market. The markets are fragmented to the extent that the actors (producers and buyers) in the markets make decisions in isolation from each other.

Often, the Government, Members of Parliament and farmers have complained about agricultural product buyers shortchanging farmers in cashew nuts, tobacco, cotton, and coffee among other crops. Complaints have been about a few buyers (levels of concentration, a trend towards consolidation) agreeing to pay low prices to farmers (anti-competitive conditions). There have been several efforts to cure the effects of the observed market failures since mid-1980's; most of these efforts have been policy oriented. These include introducing the ware house receipt system and engaging the traditional crop buyers in dialogue with the Government, Presidential and Ministerial statements condemning the acts by buyers. Despite the efforts, the vice still linger in most agro markets in Tanzania (Gibbs, 1990).

Some studies have been undertaken to find out lasting stability of the weakening market competition for the major traditional cash crops in Tanzania Gibbs (1990) on cotton and cashew nuts, Temu (1999) on Coffee and FCC (2014) on tobacco. There have also been relatively recent studies addressing this course such as Kahyarara, (2011) on market competition and performance of Tanzanian manufacturing which used HHI as a measure for competition in the manufacturing sector. In Dickson, (2014), the study endeavored to assess competition in commercial banks in Tanzania employing Panzar-Rosse model. In Mfungahema, (2014) the study assessed competition telecommunication markets in Tanzania using the structure conduct and performance model. In Chekwoti (2013), the study assessed competition pressure in

agro processing at firm level in Uganda, Tanzania and Kenya. The study employed a combination of descriptive assessment on proportion of firms that cite product market competition pressure and logistic regressions for robustness checks.

In tea agro markets, farmers have been receiving very low percentage of the export price per kilogram. The Tea Board of Tanzania, 2015 show that farmers received 2.2 %, 2.0%, 2.3%, 7.8%, 10.2%, 10.3% in 2010, 2011, 2012, 2013, 2014 and 2015 respectively. According to World Bank, (2013), ideally, a farmer should be able to receive up to a minimum of 70% of the export price. The FCC (2015) has reported that there are competition matters that remain un attended in the agro markets partly because of the inappropriate enforcement model. To this effect, the FCC has had to drop a case of un notified merger in the tobacco leaves market because of limitation of time that was occasioned by legal tussle on jurisdiction as to which law is applicable between the Tobacco Industry Act or the FCA. All these culminate to the fact that there regulatory framework is want of adequacy to provide for greatly needed competition justice in the markets and tea markets in particular.

The history of tea dates back almost 5,000 years and it currently has more than 3,000 different varieties. It is the most widely consumed beverage in the world with both a historical and cultural importance that cannot be rivaled (Tea Board of Tanzania, 2015). Tea was introduced in Tanzania by German Settlers at the Agricultural Research Station at Amani, Tanga 1902. It was grown at Kyimbila in Rungwe District, Mbeya region in 1904. Commercial production began in 1926 and increased considerably after World War II, when the British took over tea plantations. By 1960 Tanzania's tea production reached 3,700 tons of made tea (Tea Board of

Tanzania, 2015). Before independence, tea was produced in estates which were owned by foreigners and all tea related matters were handled by the then Tanganyika Tea Board. Smallholder tea farming began during the 1960s.

In 1968, the Government initiated a full-fledged smallholder tea development program whereby the Tea Ordinance Act (Cap 291) was amended and the Tanganyika Tea Board was replaced with Tanzania Tea Authority. At this point in time, all aspects of smallholder tea marketing and trade were turned over to Tanzania Tea Authority along with a wide array of other responsibilities.

In the process of restructuring the tea industry the government repealed the Tea Ordinance that established Tanzania Tea Authority (TTA) and replaced it with the Tea Act No. 3 of 1997. The act established the Tanzania Smallholders Tea Development Agency (TSHTDA) and the Tea Board of Tanzania (TBT). The Tea Board is charged with among other functions, to advise the Government on the policies and strategies for the development of the tea industry; regulate and control the quality of tea and tea by-products; collect, refine, maintain, use or disseminate information or data relating to the tea industry; monitor the production and exportation of tea; regulate processing, exportation and storage of tea and tea by-products; regulate import and export of tea; promote, protect interests of farmers against syndicates of buyers, which may be formed through associations and performing any commercial functions as the Minister may consider necessary. These are market related functions that shape and determine market dynamics in the tea markets of Tanzania.

The non-enforcement measures employed by the government over all the years in resolving market related problems such as low prices in the tea sector are a clear demonstration that an alternative approach needs to be developed that will ensure the green tea leaves farmers receive a better pay. World Bank (2013), reports that in Rwanda, the passage of a crucial reform on green leaf tea pricing is boosting tea farmers' earnings and expanding production in this key sector. The reform brings into effect a new pricing mechanism set on the international market price of processed tea, the exchange rate, and the conversion rate from green leaf to processed tea. When market prices were high under the previous mechanism, tea factories would reap the benefits, but farmers did not garner higher earnings.

The World Bank (2015) stresses on need for streamlining of the regulatory environment for agribusiness competition in priority agribusiness value chains in a holistic manner and prioritizing areas with recurring regulatory issues constraining agribusiness such as regulatory simplification to tackle monopolistic practices, constraints to competition, and opaque public sector practices in the sector with a view to open markets to increased domestic and foreign investment. The Rwandan case is almost a replica of the Tanzanian case in this study and thus making the finding useful in the current study.

As earlier asserted, the Fair Competition Act is also a market support institution that is charged with the responsibility of enhancing the welfare of the people of Tanzania as a whole by promoting and protecting effective competition in markets and preventing unfair and misleading market conduct throughout Tanzania in order to (i) increase efficiency in the production, distribution and supply of goods and services

(ii) promote innovation (iii) maximise the efficient allocation of resources and (iv) protect consumers.

Based on the foregoing, there is thus a need to synchronize the Fair Competition Act and the Tobacco Industry Act so as to ensure the tea markets are pro competition and efficient for the benefit of the stakeholders, particularly the farmers who sell their commodities to the buyers in the relevant markets.

1.2 Statement of the Research Problem and Justification

Against the foregoing background, it is the researcher's informed position that an appropriate market enforcement model to coordinate competition in tea agro markets is yet to be developed in Tanzania. This is the underpinning lacuna in the current competition regulation framework that has motivated the researcher to come up with the current study. Using a Competition Assessment Framework (CAF), which none of the referred studies in the background of the current study have used, the current study will come up with an alternative approach which shall seek to not only enforce competition but also shape market behavior dynamics in the tea agro markets for the benefits of all stakeholders i.e. the producers, buyers and the Government.

According World Bank and DFID, (2008), CAF is an operational guide for identifying barriers to competition in developing countries. It is a practical guide designed to assist policy makers in developing countries identify and focus on the key barriers to competition. These barriers can take many forms such as technical, financial, and legal, as well as those related to political economy issues and may arise from public sector actions as well as private sector ones. They have a range of

policy and administrative implications. The Framework may be of interest to others such as NGOs and donors interested in the state of competition in a country. It is based on this robust coverage that is tailor made of developing countries that the study considered CAF as a practical and useful tool of analysis for this study.

1.3 Research Objectives

1.3.1 Overall Objective

The overall objective of this study is to describe the required interlink between sectoral and competition laws so as to provide for a plausible competition enforcement model in the identified relevant markets in the tea sector using the Competition Assessment Framework (CAF).

1.3.2 Specific Objectives

- (i) To assess the adequacy of the legal and regulatory framework in providing for competitive market dynamics in the identified relevant markets.
- (ii) To identify relevant markets and anti-competitive conducts in the identified relevant markets.
- (iii) To compare the performance of identified relevant markets in the competition assessment framework perspective.
- (iv) To identify factors affecting pro competition functioning of the identified relevant markets.

1.3.3 Research Hypotheses

- (i) The legal and regulatory framework in the identified relevant markets in Tanzanian tea sector is inadequate to provide for competitive market dynamics in the identified relevant markets.

- (ii) There are no anti-competitive conducts in the identified relevant markets.
- (iii) Gross margins are the same for all the identified relevant markets.
- (iv) There are no factors affecting pro competition functioning of the relevant markets assessed in the Tanzanian Tea sector.

1.3.4 Research Question

What is the plausible competition enforcement model arising from interlink between sectoral and competition laws to provide for competitive market dynamics in the identified relevant markets?

1.4 Scope and Limitations of the Study

The present study focuses on green tea leaves buying and selling businesses in the study areas; involving identified market players as they interact in production, marketing and selling of their produce. Using green tea leaves markets in Tanzania, the study analysed supply side primary information on the farmers and their experience in selling their produce in relation to the marketing systems. Secondly the study analysed the demand side by describing the buying aspect and the transaction arrangements as well as analyzing the impact of the transaction on farmers.

Particularly, the study will provided an in depth analysis of the conduct of licensed green tea leaves buying companies in conformity with the principles of competition in a market economy on one hand; and the effect of the conduct of buyers in the market and on downstream players i.e. farmers. The study also describes and analyse the role of the Government in ensuring contestability of the market and the level of pro competition transactions is elevated and remain at acceptable standards. Thirdly,

the study examined gross margins of farmers and buyers, in a bid to establish both the performance of the relevant markets and factors affecting pro competition functioning of the relevant markets.

The study covered a sample of green tea leaves farmers and buyers in the three study areas of Rungwe, Muheza and Mufindi out of the 11 green tea leaves growing districts due to the limitations of time and financial resources. The other limitation is the fact that some of the information required by the present study was deemed to be privileged by either the parties themselves particularly the green tea leaves buyers. The fact that competition economics and competition law are relatively new phenomena in Tanzania and the region as whole; has also impacted negatively on the richness of empirical literature for competition economics and jurisprudence in terms of decided cases on competition law thus limiting the scope with which the findings could cover.

1.5 Significance of the Study

The overall objective of this study is to review the interlink between sectoral and competition laws in providing a plausible competition enforcement model in the identified relevant markets so as to uphold the spirit of the enabling Acts, meeting the expectations of the Public and thereby conforming to best practice both national and international. Secondly, the study is intended to provide to those interested in the field of competition and economic regulation of markets, useful information on the state of play in Tanzania by adding to the available information on treatment of competition issues in markets with statutorily provided monopolistic/monopsonistic features such as those in agriculture and tea in particular. Thirdly, findings of this

research may facilitate necessary steps needed in developing a better competition enforcement model for markets with statutorily provided monopolistic /monopsonistic features in the Tanzania.

1.6 Organisation of the Thesis

The thesis contains six chapters. The background information of the work is found in chapter one. Chapter two provides for literature review covering both theoretical and empirical literature on competition and tea sector. Chapter three is on the legal framework governing competition in the Tanzanian tea sector covering the Fair Competition Act and the Tea Industry Act read together with subordinate legislation made thereunder. Chapter four presents the research methodology, on which the study relied in producing the findings. Chapter five is about results and discussions of the study whereas chapter six presents conclusions of the study and relevant recommendations thereto.

CHAPTER TWO

LITERATURE REVIEW

2.1 Chapter Overview

This chapter provides definition of key competition terms as used in the practice of competition law and policy globally. The study endeavors to provide in details the not only the definitions but also the tuition behind the terms and their applicability against the backdrop of an established fact that competition policy and law are relatively new phenomena in the region and Tanzania in particular. For better readership, the review begins with the said terms. The underpinning economic and competition theories as well as the market assessment models were reviewed with a view to establish the research gap. The chapter also presents and discusses the conceptual framework.

2.2 Definition of Key Competition Terms

The key terms used in the present study are defined hereunder:

2.2.1 Competition/Antitrust

In economics it is a term that encompasses the notion of individual firms striving for a greater share of a market to sell or buy goods and services. In business, competition is defined as "the effort of two or more parties acting independently to secure the business of a third party by offering the most favorable terms" (Merriam-Webster, 2010). According to OECD as quoted in Horowitz and Currie (2007), competition protection includes adopting, interpreting and enforcing framework rules designed to ensure that markets are and remain as effectively self-regulating as possible.

In particular this involves preventing firms making anti-competitive agreements, abusing dominant positions and carrying out anti-competitive mergers. Competition, causes commercial firms to develop new products, services and technologies, which would give consumers greater selection and better products. The greater selection typically causes lower prices for the products, compared to what the price would be if there was no competition (monopoly) or little competition (oligopoly).

Competition is seen as a state which produces gains for the whole economy (total welfare), through promoting consumer sovereignty. It may also lead to wasted (duplicated) effort and to increased costs (and prices) in some circumstances. In a small number of goods and services the cost structure means that competition may be inefficient. These situations are known as natural monopoly and are usually publicly provided or tightly regulated. The most common example is water, electricity, telecommunication services (Horowitz and Currie, 2007).

2.2.2 Antitrust/Competition Policy

These are governmental measures that directly affect the behaviour of enterprises and structure of an industry. The measures give primacy to market forces, facilitate entry and exit to markets, reduce administrative controls, and minimize regulations, typical of the economic reforms in Tanzania. Such policy aims at achieving efficient allocation of resources, technical progress and consumer welfare by curtailing business conduct and restructuring which lead to concentration of economic power with the aim of monopolisation of the market (Taimoon, 1999). Petersmann (2006) defines competition policy as a set of measures that enhance inter-firm rivalry in markets by means of limiting anti-competitive private market distortions (market

failures) as well as governmental market distortions so as to promote economic efficiency (including "productive efficiency" of firms, "allocative" and "dynamic" efficiency of markets), consumer welfare and economic development”.

2.2.3 Competition Law

According to Taimoon (1999), these are specific and statutes of general application, together with the common law substance which prohibit and penalize anti-competitive practices, violation of consumer rights, and regulation of anti-competition mergers. It is an economic law; providing for the behavior of economic agents where economics as a science provides the tools with which to analyze markets and competition within them. In order to protect the consumer sovereignty, competition law imposes the following types of limitation on business:

- (i) It limits the ability of an incumbent monopolist to create barriers to the entry or expansion of its rivals (abuse of dominance/market power).
- (ii) It limits the ability of firms to raise neither prices nor profits collectively (anticompetitive agreements).
- (iii) It limits the ability of firms to achieve market power by changing the market structure by way of mergers or joint ventures (anticompetitive mergers).

2.2.4 Relevant Markets

Refers to a combination of product and geographic market as defined herein; product market is a group of products (goods or services) most buyers regard as being reasonably substitutable for each other, taking account of their respective prices and conditions of sale at either wholesale, retail or both levels. Geographic market refers

to the territorial limit that is attributed to determination of the product's value, its cost and availability among other factors (World Bank and DFID, 2008).

2.3 Theoretical Framework

2.3.1 Theoretical Aspects of Market Structures

It is stipulated in economic theory known as the theory of the forms that markets are expected to exist in perfect competitive, monopoly, monopolistic competition among others. Under all structures mentioned in Table 1, several assumptions and detailed explanation is put forward as reported by Koutsoyiannis (1985). Some basic distinctions are as in the Table 1.

Table 1: Market Characteristics in Different forms of Markets

Characteristics	Perfect competition	Monopolistic/ Monopsonistic Competition	Monopoly/ Monopsony
Number of firms	Many	Relatively many (group)	One (seller)
Product Homogeneity	Homogenous	Differentiated	
Price formation	Determined by supply and demand	Slight influence over prices, otherwise are given by demand and supply	Sets prices
Information flow	Symmetrical	Relatively Symmetrical	Asymmetrical
Promotional Strategies		Heavy advertisements	Informative advertisements.
Entry and Exit Profits	Free Normal	Free (in the group) Above Normal	Restricted Super Normal

Source: Modified from Koutsoyiannis, (1985)

In this study, the theory underpinning the perfect competitive market model as summarized by the self explanatory assumptions was used as a guiding theory as against the empirical findings obtained from the field. Invariably, monopolistic competition tendencies were regarded as one and the same as oligopoly due to their resemblances. Nevertheless, due to the nature of the markets, the concept of monopsony and thus monopsonistic competition/oligopsony were the focus of the

discussions. Other theories discussed hereunder are meant to complement, corroborate and reinforce the guiding theory as discussed above.

2.3.2 Marketing Channels

Marketing channel of farm output plays a dual role. One is to transmit a price signal between consumers and producers. The other dimension is the physical transmission of the commodity from points of production by farmers to points of purchase by consumers. The marketing system thus transforms the commodity through time, space and form (Ellis, 1992).

Form refers to all aspects physical changes in the physical attributes of the green tea leaves business between farmers and buyers. It includes production, plucking, labeling and packaging. Spatial refers to all aspects of the transport of green tea leaves from location of production to location of purchase (buying centers). Transport distances may be local (to a nearby buying centre in the village), medium (to district center) or long distance (to capital towns or gateways for exports). Marketing systems can be referred to as the vertical commodity systems or marketing channels in which commodities pass through before being ready for sale to the final consumer. The main sequential stages in a marketing system of agricultural products are:

- (a) Primary procurement, in which commodity is purchased from farmers and assembled at village level.
- (b) Processing of which commodity is transformed prior to onward distribution.
- (c) Wholesale, in which commodity changes hands in bulk at wholesale markets.

- (d) Retail, in which the commodity is sold to its final consumers.
- (e) Export, where a commodity is traded directly across the borders. This sometimes replaces the wholesale stage.

2.3.3 Market Exchange Types in a Marketing Channel

The two extremes of market exchanges are the spot (open production and marketing) and vertical integration. In between there is contract kind of exchanges. Consider Figure 1.

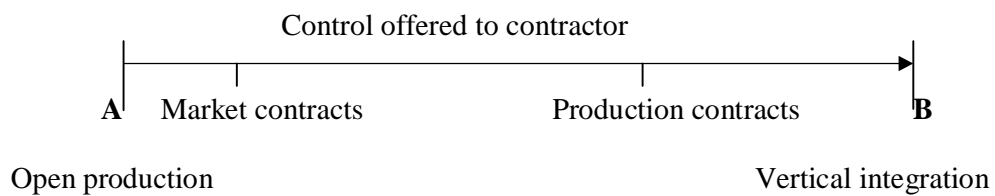


Figure 1: Vertical Integration Spectrum

Source: Mighell et al., (1993)

At point A the owner of the produce has all the liberty of producing whatever he/she wishes and market it to whomever he/she deem fit (spot). At point B there is total transfer of ownership and liberty to the contractor. In between point A and point B there exist two types of contracts, that is resource providing or production contracts whereby the contractor provides a farmer with necessary inputs for specified production conditions.

The other type of contract is the marketing contract whereby a farmer agrees to sell his/her produce to a contractor prior to harvesting day, there is usually a down payment paid to the farmer. Under these contractual arrangements there are risks of breach of

terms and conditions of agreement, this situation is referred to as moral hazard. Making of such contracts is usually associated with some costs including the costs of effecting, facilitating, implementing and monitoring of the agreement. Such costs are known as transaction costs.

2.3.4 Institutions, Organizations, Transaction Costs and the Market

North (1990) refer to institutions, as rules of the game in a society or more formally, are the humanly devised constraints that shape human interaction. Institutions structure incentives in human exchange whether political, social or economical. Institutional constraints include both what individuals are prohibited from doing and sometimes under what conditions some individuals are permitted to undertake certain activities.

Organizations are groups of individuals bound by some common purpose to achieve objectives. They include political bodies (political parties, parliament), social bodies (trade unions, churches, clubs) and educational bodies (school, university). Transaction costs are costs that are incurred in enforcing and negotiating transactions in the market, they are shaped by institutional, technological and socio-economic factors surrounding the market and its participants (Gibbs and Bromley, 1990).

According to Williamson (1993) market existence depends on institutional rules that influence exchange and organizations undertake strategies to optimise institutional structure in the market. Furthermore when fundamental conflicts between organizations cannot be mediated within the existing institutional framework, new

institutions have to emerge to combat the conflict in the market. For example organized producer groups could be cost effective than a network of individual producers working through open market transactions.

Introduction of transaction cost theory in economic analysis implies that neoclassical assumptions of perfect competitive market do not hold. For example perfect information does not hold and the open market is no longer the ultimate resource allocating mechanism. Positive transaction costs show that the system cannot correct itself and non-market interventions may be necessary. Where formal institutions are not available, informal ones do emerge but rather slow thus necessitating interventions to identify institutions and organizations that could improve the market situation (Temu, 1999).

In Stein (1994) it is argued that institutional structure of the market must evolve to support exchange where imperfect information about product attribute is prevalent. In Tanzania where agricultural markets are vulnerable to information asymmetry due to their infancy among other reasons, the arguments seem to fit well in its context, and pose a challenge to researchers in enabling the evolution of the said institutions to correct the markets. North (1990) categorized three levels of market development as hereunder:

- (i) Personalized exchange involving small-scale production and local trade.
- (ii) Impersonalised exchange that involve some long distance and cross cultural trade.
- (iii) Impersonal exchange of modern economies;

These levels of market development reflect an increasing role of price as the major factor in screening partners. Furthermore it argued that African agricultural markets often have all three-market structures simultaneously. It was also reported that when transactions are too personalized they create a social barrier to new entrants, even at the point where monetary transaction costs could be low. New entrants may not be able to penetrate the social cultural barriers.

In North (1990) it is provided that, in the course of evolving, institutions are thought to be a means to reduce transaction costs. Those that reduce transaction costs are key to the performance of economies. Since not all institutions that emerge are efficient, the role of government is crucial in specifying property rights and enforcing contracts. Furthermore, North (1990) concludes that the inability of societies to develop effective, low-cost enforcement of contracts is the most important source of both historical stagnation and contemporary underdevelopment in the third world. The foregoing assertion has motivated the present study to develop a market enforcement model in the Tanzanian Tea sector.

2.3.5 Social Capital, Asymmetry Information and Moral Hazards

Moral hazard is defined by Coase (2000) as a situation that arises when a person misleads or tricks the decision maker in order to pursue their personal interests. Such conducts are responsible for poor or lack of availability of services such as insurance and credit to small entrepreneurs (including smallholder farmers) since providers of such services becomes vulnerable to losses in presence of moral hazards among other reasons. Moral hazards can also emanate from breach of contract by either party to

the contract. Breach could come as a result of providing wrong information (information asymmetry) to the other party concerning terms of agreements (Dutta, 1994). Moral hazards are a phenomena rampantly found in agricultural markets that include those of tea and other cash crops.

Putman (1993) defined social capital to be features of social organization (in particular, horizontal association) such as networks, norms and social trust that facilitates coordination and cooperation for mutual benefit. The author further provides that social capital is hypothesized to lower transaction costs, improve diffusion of information and innovations, strengthen informal insurance mechanism, increase the probability of trust-sensitive exchanges being made and lastly improves local authority performance. Social capital has been said to be hard to measure since it a qualitative phenomena, however, Binswanger and McIntire (1987) suggested that at micro level it could be quantified by observing at contacts and other network measures, group membership and characteristics, degree of civic engagement and/or responsibility, strength of family networks and absence of violence in that particular society. The foregoing provided the general theoretical framework for the existence and functioning of the markets. The review of legal and economic aspects of competition/antitrust in markets is as provided in the subsequent subchapters.

2.4 Theoretical Review of Competition Perspectives

2.4.1 Classical Perspective to Competition

The classical perspective on competition was that certain agreements and business practice could be an unreasonable restraint on the individual liberty of the citizenry to carry on their livelihoods. Courts judged restraints as permissible or not as new

cases appeared and in the light of changing business circumstances. Hence the courts found specific categories of agreement, specific clauses, to fall foul of their doctrine on economic fairness, and they did not contrive an overarching conception of market power.

Smith (1776) reported that 'A monopoly granted either to an individual or to a trading company has the same effect as a secret in trade or manufactures. The monopolists, by keeping the market constantly under-stocked, by never fully supplying the effectual demand, sell their commodities much above the natural price, and raise their emoluments, whether they consist in wages or profit, greatly above their natural rate.' This was an early assertion on the concept of monopolisation or abuse of dominance in the history of economics.

Regarding cartels, Smith (1776) reported that "People of the same trade seldom meet together, even for merriment and diversion, but the conversation ends in a conspiracy against the public, or in some contrivance to raise prices. It is impossible indeed to prevent such meetings, by any law which either could be executed, or would be consistent with liberty and justice. But though the law cannot hinder people of the same trade from sometimes assembling together, it ought to do nothing to facilitate such assemblies; much less to render them necessary."

Mill (1859) reported to have disagreed with existence of not only dominant and abusive corporations, but also corporations as a whole. "Again, trade is a social act. Whoever undertakes to sell any description of goods to the public, does what affects the interest of other persons, and of society in general; and thus his conduct, in

principle, comes within the jurisdiction of society, both the cheapness and the good quality of commodities are most effectually provided for by leaving the producers and sellers perfectly free, under the sole check of equal freedom to the buyers for supplying themselves elsewhere. This is the so-called doctrine of Free Trade, which rests on grounds different from, though equally solid with, the principle of individual liberty asserted in this Essay. Restrictions on trade, or on production for purposes of trade, are indeed restraints; and all restraint, qua restraint, is an evil".

Nonetheless, as the world continued experiencing innovations and inventions of technologies overtime, it became apparent that large firms were an inevitable fact of the market economy; and lack of legal measures to combat them is cited as among its weaknesses. Nevertheless, the classical approach is highly acknowledged for its contribution in setting the basic principles in development of modern competition/antitrust theory and practice.

2.4.2 The Neo Classical Perspective to Competition

Beyond the classical theorists, there was a paradigm shift in economic theory, with emphasis in a more precise and theoretical model of competition. Neo-classical model of market economy asserts that production and distribution of goods and services in competitive markets maximizes social welfare. This model assumes that new firms can freely enter markets and compete with existing firms; in other words there are no barriers to entry into markets.

Galbraith (1967) reports that based on the neo classical model, competitive markets are enabled to deliver allocative, productive and dynamic efficiency. Allocative

efficiency is also known as Pareto efficiency which means that in the long run resources in an economy will flow towards those with the willingness and ability to pay for them. Rationality of the market actors is an inbuilt factor to the neoclassical model, whereby it is envisaged that rational producers will keep producing and selling on the supply side whilst buyers will continue buying up to the last marginal unit of possible output. Invariably rational producers will reduce their output to the margin at which buyers will buy the same amount as produced (equilibrium point). At this point, there is no waste and the greatest number of people's wants are satisfied and utility is perfected because resources can no longer be reallocated to make anyone better off without making someone else worse off (pareto optimal); and ultimately the society was considered to have attained allocative efficiency.

Productive efficiency means that society is producing as much as it can at a particular time. Markets are meant to reward those hard workers; economically speaking, best rewarded was those who will put society's resources on the frontier of its possible production (Galbraith, 1967). Dynamic efficiency refers to the idea that business which constantly compete must research, create and innovate to keep or even increase its consumer base. This phenomenon is also referred to as a "perennial gale of creative destruction" said to be ever sweeping through capitalist economies, driving enterprise at the market's mercy (Schumpeter, 1942).

Monopolies, oligopolies, and cartels operate contrary to the allocative, productive and dynamic efficient market model. When only one (monopoly) or a few firms exist (oligopoly) in the market, and there is no credible threat of the entry of competing firms, prices rise above the competitive level, to either a monopolistic or

oligopolistic equilibrium price. Production is also decreased, further decreasing social welfare by creating a deadweight loss.

Sources of this market power are said to include the existence of externalities, barriers to entry into the market, and the free rider problem. Inversely, these sources of market power are among a variety of reasons that make markets fail to be efficient (market failure); thus justifying the exception of competition law's intervention to the rule of *laissez faire*¹.

According to Clark (1940) and Whish (2003), orthodox economists² fully acknowledge that perfect competition is seldom observed in the real world, and so aim for what is called "workable competition". This follows the theory that if one cannot achieve the ideal, then go for the second best option by using the law to tame market operation where it can (Lipsey and Lancaster, 1957). This study has thus adopted the neoclassical approach as its theoretical base of analysis.

2.4.3 The Chicago School's Ten Propositions

The Chicago School of Economics describes a recent and leading neoclassical school of thought within the academic community of economists, some of whom have constructed and popularized its principles. With regard to antitrust, the School has made the following positions:

- (i) Economic efficiency consists of two parts: Productive efficiency: the ratio between the value of the firm's output and the value of the firm's inputs. The

¹ In economics, *laissez-faire* describes an environment in which transactions between private parties are free from state intervention, including restrictive regulations, taxes, tariffs and enforced monopolies.

² Neoclassical economists, who believed that economic theory was to be created, not merely learned and applied. The main hallmark of orthodox economists is the attitude that economic principles may need clarification and perhaps even generalisation, but they exist and are to be mastered and applied in solving problems in the society.

higher this ratio the more efficient is the firm. Allocative efficiency: is the general efficiency of markets. Optimal allocative efficiency is attained when markets are competitive, that is, when price equals marginal cost. Increases in productive efficiency often reduce the market's allocative efficiency. For example R&D, or the construction of a great plant. Bork (1978) reports "the whole task of antitrust can be summed up as the effort to improve allocative efficiency without impairing productive efficiency".

- (ii) Most markets are competitive, even if there are few sellers. Even if they agree to coordinate prices they continue to compete in other ways, such as increasing customer services. Product differentiation undermines competition far less than presumed and it makes collusion far more difficult to maintain.
- (iii) Monopoly when it exists tends to be self-correcting: higher profits attract new entry. Natural barriers to entry are more imaginary than real. Investment tends to flow into any market where the rate of return is high, except when there are legal barriers.
- (iv) Economies of scale are far more pervasive than economists once believed, largely because economists looked only at intra-plant or production economies and neglected economies of distribution.
- (v) A firm generally maximizes its profits when downstream and upstream firms behave competitively. So, virtually all instances of vertical integration and vertical restraints are efficient.

- (vi) The integrity of the market efficiency requires that only a few firms are profit maximizers. It may turn out that many firms are non-profit maximizing firms. The profits and market shares of the profit maximizers will grow at the expense of the non-profit-maximizers.

- (vii) Antitrust enforcement should be designed in such a way as to penalize conduct to the point that it is inefficient, but to tolerate or encourage when it is efficient. Most competitor lawsuits should be thrown out, and private enforcement limited to consumers.

- (viii) Government intervention is justified only if the result is an improvement, taking into account the costs of intervening.

- (ix) Antitrust policy should adopt the market efficiency model without regard to wealth distribution. That is a practice that produces greater gains to business than losses to consumers should not be considered illegal. The same should be said about practices that produce larger gains to consumers than losses to business (Posner, 2001).

Irrespective of the foregoing perspectives, economists across the divides have a convergence in what is referred to as substance of competition economics as hereunder discussed.

2.5 The Substance of Competition Economics

According to Posner (2001), the role of economics in antitrust policy evokes two questions:

- (i) Should economic efficiency be the only goal in antitrust policy?
- (ii) What kind of economics should antitrust policy use?

Some people believe that antitrust policy should consider some “alternative goals” such as the maximization of consumer wealth, protection of small businesses, encouragement of morality or “fairness” in business practices, and some others. These “competing values” however, not only can be inconsistent with both allocative and production efficiency, but they are mostly inconsistent with each other.

On the other hand, even the multivalued policy maker needs economics to help him estimate the relative costs of protecting certain non-economic values and determine whether society should pay the price. The best economics for antitrust is generally the one which is relatively uncontroversial and well established in the literature. More complex theories have policy implications and someday may become economic orthodoxy. But until that time occurs, they are best left to academics (Baca, 2007).

2.5.1 Market Power and Consumer Welfare in Competition Economics

2.5.1.1 Market Power

Refers to the firm’s ability to deviate profitably from marginal cost or competitive pricing in the relevant market. The Lerner index is one attempt to quantify market power in terms of marginal cost. Its simplest formulation is:

$$L = \frac{P - MC}{P} = \frac{1}{\varepsilon^D}$$

Where P is the firm's price and MC is the firm's marginal cost, both at its profit maximizing level of output. The term $P-MC$ is often called the monopoly mark-up. The Lerner index can also be shown to equal the reciprocal of the elasticity of demand facing the firm.

For example, if the elasticity of demand is 3, the Lerner index is $1/3$.

Solving the equation above we obtain: $P=1.5 MC$

In this case, a firm with marginal costs of TZS 10 would have a maximizing price of TZS 15. The monopoly mark-up is TZS 0.50 (or 50%).

The monopolist maximizes its total profits when:

$$MR = MC$$

$$\text{But } MR = P_x (1 - 1/\epsilon^D)$$

$$\text{So: } P_x (1 - 1/\epsilon^D) = MC$$

$$P - P/\epsilon^D = MC$$

$$P - MC = P/\epsilon^D$$

$$(P - MC)/P = 1/\epsilon^D$$

2.5.1.2 Consumers' Surplus, Producers' Surplus and Total Welfare

Consumers' surplus is the amount they are willing to pay for a product minus the amount they actually pay. Producer surplus is the amount that producers are paid for a product minus the total variable cost of production. A perfectly competitive market maximizes both consumer and producer surplus. Total welfare is the sum of both surpluses. So, a perfectly competitive market maximizes total welfare.

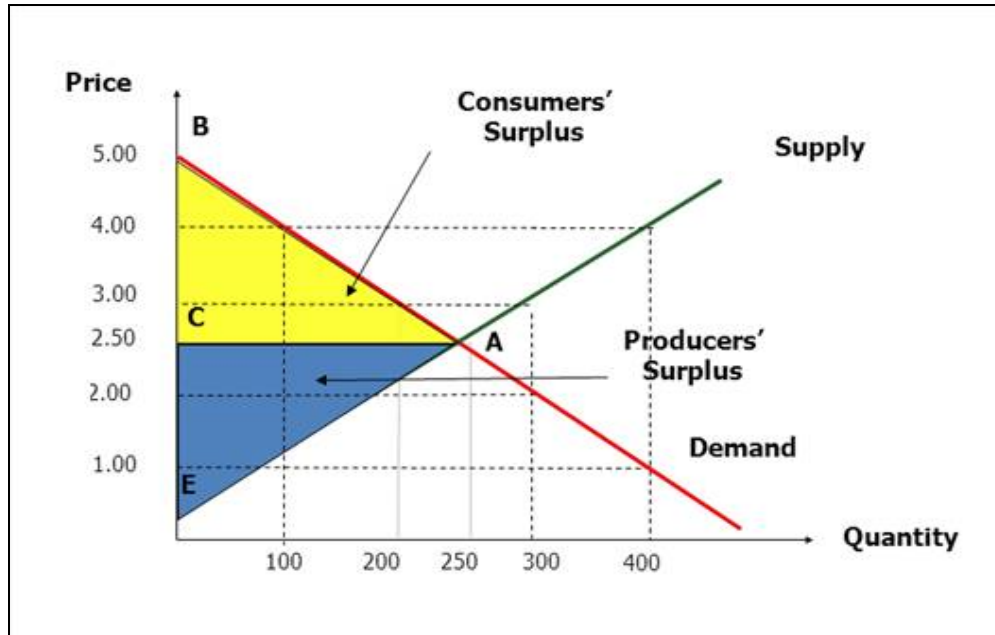


Figure 2: Consumers' Surplus and Producers' Surplus

Source: (Posner, 2001)

Figure 2 shows that at low levels of quantity or output, the market price is quite high. Sellers were earning excessive profits. Existing sellers were encouraged to increase their output. Additionally, new sellers will come into the market. As output increases, the market price will fall. The market will finally stabilize at point A. Triangle ABC represents consumers' surplus. Triangle ACE represents "producers' surplus."

The attitude of antitrust laws towards productive efficiency is affirmative, but passive; those activities that increase a firm's efficiency are generally permitted unless the activity also enhances the firm's power. Allocative efficiency, that is, welfare for society, is a more theoretical and controversial concept. The most influential definition was given by the French-Italian economist Vilfredo Pareto, early in the twentieth century:

“A given assignment of resources is most efficient (is “Pareto optimal”) if no alternative assignment will make at least one person better off without making at least one person worse off” (Posner, 2001 at pg 221).

If one begins with an imperfect economy, a change is “Pareto-superior” if it makes at least one person better off and makes no one worse off. The concept of Pareto superiority is, however extremely rigorous: a change in a social policy is Pareto-superior only if no one objects. Antitrust economists prefer a variation of Pareto-efficiency called “potential” Pareto-efficiency. A change is efficient if the gainers from the change gain enough so that they can fully compensate all losers out of these gains. Whether the gainers actually compensate the losers out of their gains is irrelevant. The adoption of a rule against monopolization or price fixing is efficient under the potential Pareto criterion.

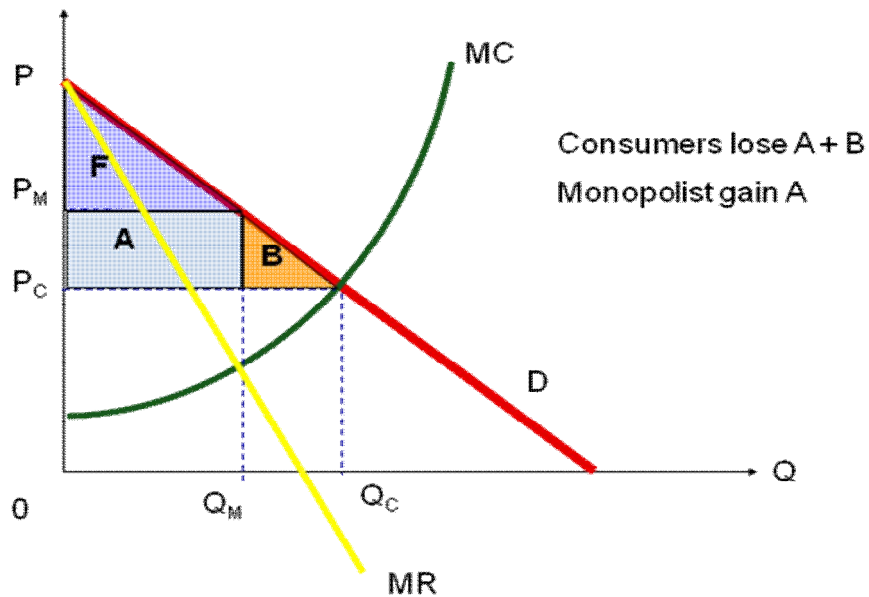


Figure 3: Monopolistic Vs Competitive Market Scenarios

Source: (Posner, 2001)

In a competitive market, with price at marginal cost, consumer's surplus would equal $A+B+F$ in Figure 3. The monopolist or cartel will reduce output to Q_M and raise prices to P_M . Consumer surplus will reduce to triangle F and the loss to consumers will equal $A+B$. The gain to the monopolist is only A . Triangle B is lost by both consumers and the monopolist.

Although monopolists are richer as a result of monopolization, consumers are poorer in even a greater amount. So, a move from monopoly to competition is efficient by the potential Pareto measure. The same thing is generally true of actions that increase a firm's productive efficiency without increasing its market power. For example, a cost reducing vertical integration that makes both consumers and the integrating firm better off, while competitors are worst off (Posner, 2001).

Potential Pareto efficiency can be a useful guide for antitrust policy, but it is subject to two important qualifications.

- (i) Potential Pareto analysis is indifferent to how resources are distributed in society. However, the legislative history of the Sherman Act in the US shows a great deal of concern for wealth transfers from consumers to monopolists.
- (ii) The potential Pareto criterion requires identifying all the winners and losers; and sums the value of their benefits and losses.

Despite these criticisms, the potential Pareto criterion is still a useful guide. In most cases it is easy to predict that the social gains outweigh the social loss or vice versa. Antitrust analysis has often used a substitute term, the "consumer welfare principle" on many people's account that the goal of antitrust should be to maximize the

welfare of consumers. This concept is however, ambiguous as it assumes that everyone is a consumer without regard to scenarios issues like when antitrust policy seeks to maximize small business welfare. Since all of us are consumers, an antitrust policy of maximizing welfare is really a policy of maximizing everyone's welfare (Bork, 1993).

2.5.1.3 Competition Policy and the Social Cost of Monopoly

Monopolization is a process with its social costs which in turn bring about the main concern of antitrust law. A social cost is a net loss that society suffers as a result of a particular transaction (Sullivan and Grimes, 2006). For example, if consumers abstain from buying a product for which they are willing to pay TZS 140, because the producer charges TZS 150, and decide to buy a substitute that they value at TZS 130 and costs TZS 110. If the alternative transaction takes place, the consumer was TZS 20 better off. However, this transaction is less favourable to both consumers and society as a whole than the preferred transaction would have been.

For antitrust purposes, the social loss of monopoly is equal to the loss produced by monopoly pricing and monopoly behaviour, minus any social gain that monopoly produces. For example, monopoly can be created by research and development. A monopoly can avoid some costs involved with competition such as the costs of making and interpreting competitive bids, or the inefficient duplication of productive assets or processes (Posner, 2001).

The competition offence of creating or maintaining a monopoly by means of anticompetitive exclusionary practices is a process rather than merely an outcome.

Sometimes we distinguish the outcome “monopoly” and the process by which it is created. Competition policy is concerned with both the process and the outcome. Competition law requires not only a monopoly position, but also the commission of one or more anticompetitive exclusionary practices, thus signalling that the process by which the monopoly is to be created, determines its legality. Antitrusters often say that their main concern is monopoly, but this is not quite true. Their principal concern is monopoly created by certain means (Hovenkamp and Areeda, 2004). The social cost of monopoly includes deadweight loss caused by monopoly, rent seeking and the lost competitor investment as discussed hereunder.

2.5.1.4 The Deadweight Loss Caused by Monopoly

Monopoly forces some consumers and firms to forego the transactions that were their first choice and would have produced the largest benefit. The social cost of these foregone transactions is the difference in social value between the transactions that take place in a monopolized market and those that would have taken place in a competitive market. For this reason the patent law may be socially valuable, even though they create monopolies.

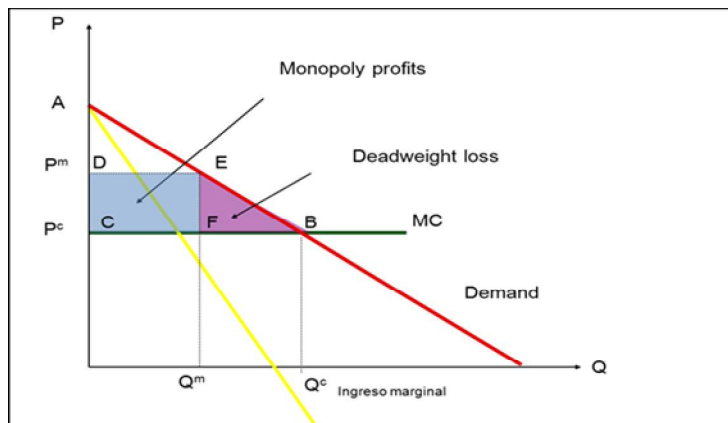


Figure 4: The Deadweight Loss of Monopoly

In Figure 4, the triangle ABC represents the reduction in consumers' surplus. Rectangle CDEF represents a wealth transfer to the monopolist. Triangle EFB is the deadweight loss of monopoly. Consumers located between E and B are not willing to buy the monopolized product at the monopoly price. Instead, they substitute to some other product that would have been their second choice in a competitive market. The deadweight loss arises because the monopoly encourages some customers in an alternative transaction that produces less social value than their first choice would produce. A monopoly in the copper market may force electrical equipment producers to switch to aluminium they prefer copper and are willing to pay the competitive price (Mitchell, 2003).

2.5.1.5 Rent Seeking

The de facto monopolist must continually exclude competitors who would increase output and drive prices down to the competitive level. At the outer limit, the monopolist would expend all its expected monopoly profits in protecting its position by means of inefficient exclusionary practices. For example, the monopolist might deter competition by charging a price lower than its short run profit-maximizing price (predatory pricing). The monopolist might also invest resources in other practices such as sabotage, espionage, vexatious litigation, false and misleading advertising.

According to Mitchell (2003), it is also possible that monopoly "deadens initiative" and results in less efficient use of resources. Schumpeter (1942) holds the view that since research is both expensive and risky, firms in competition would not be able to afford it. However, the evidence of the relationship between monopoly and

innovation is ambiguous. For example, the computer revolution in the late 1970's and early 1980's involved the research activity in many tiny firms.

2.5.1.6 Lost Competitor Investment

Exclusionary practices, or rent seeking, by the monopolist imposes inefficient losses on competitors or perhaps other agents, and these losses are potentially unlimited. These losses are the cost of the competitor's disassembled plant, inventories and perhaps goodwill, as well as the cost of retraining employees whose jobs have been lost and of reliance interests lost by broken contracts (Mitchell, 2003).

2.5.1.7 Monopsony: Definition, Prices, Output Effects and Policy Implications

According to Barry and Argus (2008), monopsony is a market form in which only one buyer (the monopsonist) faces many sellers; as such it is a mirror image of monopoly. A monopsonist has market power, because it can affect the market price of the purchased good by varying the quantity bought. For example, it can force suppliers to sell at a lower price by reducing its demand. Formally, this is so because a monopsonist faces a supply curve with finite (and generally positive) price elasticity. The monopsonist increases its market demand until the cost of one additional unit (marginal cost) equals the value of the services rendered by this unit (marginal revenue). Marginal cost is more than price because the supply curve is upward-sloping. That is, in order to buy another unit, the monopsonist must pay a higher price on all units. The monopsonist maximizes its profits where:

$$MR = MC$$

The price that the monopsonist is willing to pay for each additional unit (P) is the extra revenue produced by this unit (MR). That is: $MR = P$

$$C = \text{Total Cost} = P \times Q$$

$$MC = \text{Marginal Cost} = \Delta C / \Delta Q = \Delta(P \times Q) / \Delta Q$$

$$MR = P \times (\Delta Q / \Delta Q) + Q \times (\Delta P / \Delta Q)$$

$$MR = P + Q \times (\Delta P / \Delta Q)$$

$$\Delta P / \Delta Q < 0$$

$$MC > P$$

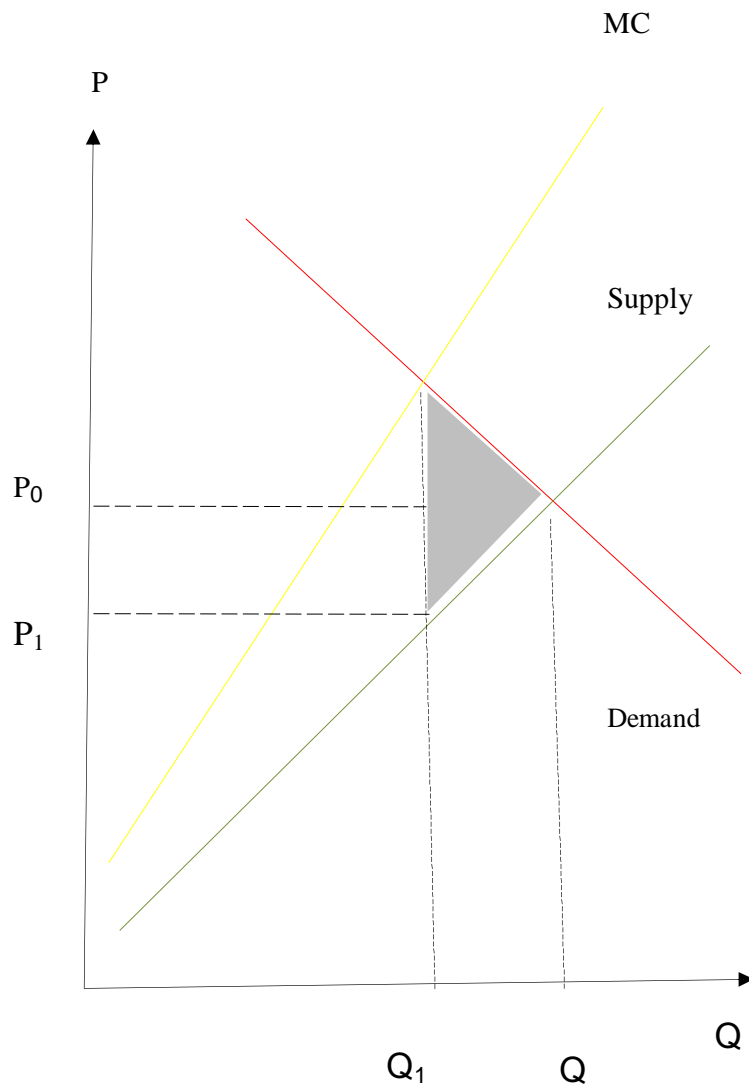


Figure 5: Price and Output Determination by a Monopsonist

Source: (Mitchell, 2003)

Figure 5 explains a situation in a competitive market whereby Q^0 units would be produced at a price of P^0 . However, given that there is only one buyer in this market (the monopsonist), Q^1 units was produced. The monopsonist will pay the lowest price the producers are willing to accept, that is P^1 . The important policy implication of a monopsony is that it usually reduces both price and output in the monopsonized market (Barry and Argus, 2008).

A principal difficulty of competition policy towards monopsony is distinguishing between efficient low purchase prices that result from reduced transaction costs of upstream monopoly and the inefficient low prices that result from monopsony. The most problematic area is joint purchasing arrangements, which create a significant potential for cost savings but may also facilitate buyer price fixing. The practical point that analyst should address is whether the monopsonists are encouraging their managers to buy as much as possible, which is inconsistent with buyer price fixing, or encouraging them to suppress their buying (Barry and Argus, 2008).

In this study, the relevant markets are expected to be monopsonistic, duopsonistic or oligopsonistic as there are a few buyers or one buyer and many sellers; so the study focused on “buyer power”; a form of market power which can disadvantage sellers and create inefficiencies just like "seller power," more commonly known as monopoly power in monopoly markets. The study generally examined “monopsony” concerns, referring to the potential for sellers to be harmed by anticompetitive conduct or mergers at the buyer side in the market. Weiser (2009) reports that focus on promoting competition as a guiding principle is entirely compatible with

enforcement action in a monopsony case when the facts warrant especially in a scenario that buyers obtain market power through merger or restrained trade and thereby depress prices for the products they purchase below competitive levels. Producers of those products will have depressed incentives to produce, which will result in reduced quantities of those products available for consumers compared to what would be available in a competitive market.

2.5.2 Benefits of and Limitations of Competition

According to Petersmann (2006), competition causes commercial firms to develop new products, services and technologies, which give consumers, not only better products and services but also increased choices thereof. The increased choices typically causes lower prices for the products and services, compared to what the price would be if there was no competition (monopoly) or little competition (oligopoly).

Generally, competition is a state which produces gains for the whole economy (total welfare), through promoting consumer sovereignty (consumer welfare) while ensuring sustainable production of goods and services and provision of services (producer welfare). Depending on country's respective economic policy, competition is to a greater extent regulated by competition policy and competition law with emphasis on promotion of consumer welfare. Competition policy and law focuses on ensuring that at any point in time in market, there is the following:

- (i) Most efficient use of resources; (efficient allocation of resources)
- (ii) Passing of cost savings to consumers; (efficiency)
- (iii) Generation of better production processes; (innovation)

(iv) Generating better organization structures; (consumer protection)

It is important to recognize at this juncture, that competition policy refers to broader phenomena than competition law does. Whereas competition law emphasizes on enforcement of certain agreed set of principles to guide competition, competition policy seeks to promote compliance with the said agreed set of principles through both non enforcement (advocacy) and enforcement (Petersmann, 2006).

In a small number of goods and services markets, competition may lead to increased costs and prices thus rendering competition inefficient. The most common examples are water, electricity and telecommunication services. These situations are known as natural monopoly and are usually regulated by a designated sectoral regulator or publicly provided in some economies (Taimoon, 1999).

2.5.3 Market Regulation

In the context of competition, this is a term that refers to framework for guiding of sectors whose structures are such that competitive market forces (demand and supply) cannot operate to bring about market efficiency (Taimoon, 1999). Regulation is thus categorized into two aspects as discussed hereunder.

2.5.3.1 Economic Regulation

Regulation would usually concern markets where fixed costs are so high that many firms (as required by competition) would not operate profitably; this market characteristic describes a market structure known as a natural monopoly. Examples

of these markets are electricity (its transmission phase), telecommunications (local loops) and railways (the network).

Activities that entail economic regulation include the following:

- (i) Ensuring non-discriminatory access to necessary inputs like network infrastructures;
- (ii) Adopting cost based measures to control monopoly pricing;
- (iii) Controlling or specifying production technologies (other than those linked with setting of technical product/service standards);
- (iv) Granting and policing licenses to eligible providers; and
- (v) Setting output prices and other terms of sale.

Economic regulation therefore applies to sectors where structural conditions are such that competition is either non-existent or inherently limited to the extent that consumer welfare would in fact be damaged in the absence of regulatory intervention (Taimoon, 1999).

2.5.3.2 Technical Regulation

It includes setting and monitoring standards of goods/services so as to ensure compatibility with agreed benchmarks. It also addresses privacy, safety and environmental protection concerns as well as allocating publicly owned resources such as spectrum (Taimoon, 1999).

2.6 Relationships between Competition Law and Economic Regulation

Basically, competition law and economic regulation aim at defending the public interest against monopoly power. If both provide tools to a Government to fulfill this objective, they vary in scope and types of intervention. Competition law and regulation are not identical. There are four ways in which competition law and economic regulation problems can interact. These are as follows:

2.6.1 Regulation can Contradict Competition Policy

Regulations may have encouraged, or even required, conduct or conditions that would otherwise be in violation of the competition law. For example, regulations may have permitted price coordination, prevented advertising or required territorial market division. Other examples include laws banning sales below costs, which purport to promote competition but are often interpreted in anti-competitive ways, and the very broad category of regulations that restrict competition more than necessary to achieve the regulatory goals. Modification or suppression of these regulations compels firms affected to change their habits and expectations (Taimoon, 1999).

2.6.2 Regulation can Replace Competition Policy

In natural monopolies, regulation may try to control market power directly, by setting prices (price caps) and controlling entry and access. Changes in technology and other institutions may lead to reconsideration of the basic premises in support of regulation, i.e. that competition policy and institutions would be inadequate to the task of preventing monopoly and the exercise of market power (Taimoon, 1999).

2.6.3 Regulation can Reproduce Competition Law and Policy

Coordination and abuse in an industry may be prevented by regulation and regulators as competition law and policy do. For example, regulations may set standards of fair competition or tendering rules to ensure competitive bidding. However, different regulators may apply different standards, and changes or differences in regulatory institutions may reveal that seemingly duplicate policies may have led to different practical outcomes (Taimoon, 1999).

2.6.4 Regulation can use Competition Institutions' Methods

Instruments to achieve regulatory objectives can be designed to take advantage of market incentives and competitive dynamics. Coordination may be necessary in order to ensure that these instruments work as intended in the context of competition law requirements.

Table 2: Differences between Competition Policy and Sector-specific Regulation Approaches

Requirement	Competition Policy	Sector-specific Regulation
General approach	Ex-post, harm based approach	Ex-ante, prescriptive business conduct
Institution design	Horizontal institution lawyers and economists	Sector-specific institution: sector-specific scientists, engineers and economists
Amount and nature of information required	Only information on the allocated abuse	General and detailed information on the sector
Nature of the remedies imposed on undertaking	Structural remedies addressed to specific conduct	Detailed conduct remedies requiring extensive monitoring
Nature of public intervention	Permanent based on general competition policy principles	As competition is more effective, part of sector specific regulation are replaced by competition law

Source: Taimoon, (1999)

2.7 Review of Methodologies in Competition Assessments

Literature on methodologies of agro market behavior in developing countries is mostly based on the theory of the firm which studies the supply of goods by profit-maximizing agents and attempts to distinguish between long-run motivations (sustainability) and short-run motivations (profit maximization) of the agents. Features of the theory of the firm include Perfect Competition, Monopoly, Monopsony, Monopolistic Competition, Price Discrimination and The Demand for Labor (www.econmodel.com).

2.7.1 Structure, Conduct and Performance Model

According to Daly et al (2010) the structure-conduct-performance approach, an industry's performance (the success of an industry in producing benefits for the consumer) depends on the conduct of its firms, which then depends on the structure (factors that determine the competitiveness of the market). The structure of the industry then depends on basic conditions, such as technology and demand for a product. Components that make up the structure, conduct, and performance model for industrial organization include:

2.7.1.1 Structure

Refers to number of buyers and sellers, barriers to entry of new firms, product differentiation, vertical integration and diversification. The structure critically determines nature of performance depending on the firm's concentration. It can be measured by HHI statistics, which is the measure of the degree of concentration. Structure is reported to significantly affect firms' performance and pricing strategy (Bikker and Haaf, 2002).

2.7.1.2 Conduct

Refers to advertising, research and development, pricing behavior, plant investment, legal tactics, product choice, collusion, merger and contracts. Basic conditions to conduct include consumer demand, production, elasticity of demand, technology, substitutes, raw materials, seasonality, unionization, rate of growth, product durability, location, lumpiness of orders, scale of economies, method of purchase, and scope economies (Daly et al., 2010).

2.7.1.3 Performance

Refers to price, production efficiency, allocative efficiency, equity, product quality, technical progress and profits. Performance indicates the status of efficiency. Structure, conduct and performance are three interrelated items. Structure influences conduct and conduct influences firms behaviour, hence performance. The main weakness of the structural conduct performance model is that it treats the market structure as an exogenous variable, but in real world market structure is also affected by the firms conduct, hence performance (Daly et al., 2010).

2.7.1.4 Government Policy

Refers to government regulation, competition, barriers to entry, taxes and subsidies, investment incentives, employment incentives and macroeconomic policies. The Chicago School drawing on analysis by Alchian (1950), Stigler (1951), Posner (1972), Demsetz (1973) and reflecting the influence of the Austrian School, challenged the notion central to the S-C-P paradigm that market behaviour and performance are strictly related to market power.

Critiques argue that since competition is a process, it can lead to a variety of market structures that give efficient results adding that competition only generates an atomistic market structure in those cases where the market and production processes favour the operation of very small, efficient firms. Otherwise, production efficiency may have a scale dimension and require large firms, so the highly concentrated industry can also be associated with efficiency.

Regardless of the critiques levelled against the S-C-P paradigm, it is still in use and command wide acceptance among economist worldwide. According to Hovenkamp and Areeda (2004), the S-C-P paradigm has proven hard to kill; the most that can be done to the theory is improvement to suit analyses in the myriad markets. One such improvement is that offered by DFID in the Competition Assessment Framework (CAF). The model borrows from the S-C-P, and builds on it to provide for a tool that can be applied in analysing competition in markets. The model is as hereunder discussed.

2.8 The Research Model: Competition Assessment Framework

According to World Bank and DFID (2008), the essential parts of the model are provided in step, for which the last is a logical conclusion based on the issues identified under the every steps, their inter linkages and severability. The steps are as follows:

2.8.1 Identify the Relevant Markets

The first step is to identify and define the relevant 'market/s' in the sector as a sector could include a number of distinct markets. If so, each of the markets should be examined separately, as the state of competition might vary significantly between them. Markets have two key dimensions and both are needed for a complete definition. One is the good or service concerned, (the 'product market'). The other is the geographic extent of the product market within which buyers and sellers can interact (the 'geographic market'). The term relevant market refers to the group of goods or services most buyers regard as being close substitutes when relative prices change. If the suppliers of a product were to increase price by a non-trivial amount, would it retain sufficient customers to make the price rise profitable? The answer to this will depend on whether the customers have any feasible alternatives, taking account of any costs that might be involved in changing suppliers.

2.8.2 Identify the Existing Competitors

The major suppliers should be identified by names and if there are numerous small suppliers, they should be grouped appropriately. It should also be established, to what extent are imports a realistic alternative for buyers, taking account of any unique features of the products, delivery time, import duties and transport costs?

2.8.3 Examine the Market Structure

This involves identifying the relative importance of the main suppliers in the market. If a small number of suppliers accounts for a large proportion of supply, the market is said to be highly concentrated. Market shares of participants and concentrations

have to be measured. Market shares are usually measured by the value of sales, but the quantity of goods sold or the capacity of the suppliers may also be relevant.

When assessing the size of a market, information should be sought from the major participants (both sellers and buyers), relevant trade associations, consumer organizations and any relevant government agencies. High concentration does not necessarily indicate high market power and a competition problem, and further the following issues must be considered:

- (i) Have the market shares of the major suppliers (or buyers) been stable over a long period? This may lead to entry barrier and predation.
- (ii) Has there been much market entry in the past and how successful has it been? (If there has been little or no entry over an extended period, this might suggest barriers to entry are high).
- (iii) Does a single buyer, or a small number of large buyers, account for a substantial part of the market?

2.8.4 Barriers to Entry

For a market to remain competitive, it must be possible for new firms to enter, and for existing firms to expand or to leave. If there are barriers that either prevent entry or would delay it considerably, or that would make it costly to enter the market, the existing suppliers might be able to raise prices above the competitive level. Even if market shares are high, this might not result in prices above competitive levels if new suppliers are likely to enter.

However, for a threat of new entry to provide a significant constraint, it must be likely, sufficient and timely. Classification of barrier to entry includes (a) natural barriers such as Resources (sunk costs), Access to Technology, Existence of large economies of scale, Access to raw materials and Access to distribution channels (b) strategic barriers which are a result from actions by existing suppliers that are intended to discourage new entry. They could include: creating excess capacity, bundling and tying, exclusive contracts, individually or collectively acting in ways that indicate the incumbent firm or firms would act in a predatory or aggressive way if new entry took place, such as through price responses (c) regulatory and policy barriers, that there can be sound public policy reasons for restrictions, such as health and safety concerns, national security, or even short-term 'industrial policy' to develop infant industries or particular geographical districts. However, the rationale for restrictions that limit competition requires objective justification.

2.8.5 Government Policies or Institutions Limiting Competition

2.8.5.1 State-owned Enterprises

- (i) Does any state-owned enterprise/s operate in the market/s being assessed?
- (ii) If so, does the enterprise/s receive any benefit/s or preferential treatment not available to other firms which appear to have the effect to competition in the relevant market/s?
- (iii) If the state-owned enterprise does receive benefits and these appear to limit competition, how significant is the effect?

2.8.5.2 Public Procurement

Represent a significant part of trade in an economy, and the way in which procurement is undertaken can raise substantial competition issues. The way in which Government organizes its procurement might limit the scope for new competitors to enter the market. If the Government is a major buyer of the product/s, does it appear that Government procurement policies have adequate safeguards for competitive bidding, for transparency and for fairness?

2.8.5.3 Regulated Sectors

Are the sectors condemned to economic regulation selected objectively based on economic principles and the process that preside the selections credible? How are the selected markets governed in relation to competition? Are block exemptions provided for in the competition law and how is it being operationalized in co-existence with the sectoral laws, economic regulation authorities law and other macro policies?

2.8.5.4 Trade Policy and Industrial Policy

Policies of Governments on trade and on industry can have a large impact on the level of competition.

2.8.5.5 Unequal Enforcement of Laws and Regulations

Do any firms in the market suffer from the unequal application of laws or regulations? Examples of where this might occur include the unequal enforcement of taxes, labour regulations, health and safety regulations, access to land, access to key infrastructure, standards and intellectual property rights.

2.8.5.6 Vested Interests

In many situations there are stakeholders who are opposed to increased competition in a market. Even if their identity and objectives are widely known, their power and influence should be reflected in the competition assessment. Politics, including funding for political parties from sector interests, may well be involved.

2.8.6 Anti-Competitive Conduct

2.8.6.1 Horizontal Issues

(a) Abuse of Dominance

For a firm to abuse dominance in a market, it needs to have a high market share. A dominant firm is one that has sufficient market power to allow it to make price and output decisions without having to take account of the likely reaction of competitors.

A dominant firm may:

- (i) Increase prices above competitive levels, (charge excessive price);
- (ii) Prevent smaller competitors from increasing their market shares;
- (iii) Discourage market entry (engage in an exclusionary act);
- (iv) Refuse to give competitor access to essential facility.

(b) Collusion and Cartels

Competitors sometimes collude to limit the intensity of competition by making agreements to fix prices, to divide the market between them, to conduct boycotts or to rig bids for contracts.

2.8.6.2 Mergers

Where there is a substantial increase in concentration through mergers or acquisitions, dominance or collusion may be more likely. However, if there are low barriers to entry, or countervailing buyer power, the anticompetitive influences arising from increased concentration might be offset.

2.8.6.3 Vertical Integration Issues

There could be vertical arrangements in business, such as those between suppliers and retailers. Under such circumstances, dominance, collusion and mergers can all generate extra issues when there are vertical restraints within supply chains, that is, between producers, wholesalers or retailers.

- (i) Do any suppliers require that resellers not sell below prescribed minimum prices, or that they observe prescribed discount levels?
- (ii) Are there any other vertical restraints such as quantity forcing, franchise fees, exclusive dealing or exclusive territories?

2.8.7 Draw Conclusions

Based on the facts and figures gathered from the itemized steps above, a logical conclusion on the state of competition in the relevant market can be drawn.

2.9 Review of Empirical Competition Literature

The Chicago school antitrust scholar believes that courts should not intervene unless the economic case against a practice is so strong that all reasonable dissenting voices have been squelched. When in doubt, let the market take care of itself. By contrast,

the antitrust moderate is more willing to weigh competitive economic theories and decide which one, competitive or anticompetitive, is better fit for the case at hand.

Competitors are simultaneously the worst and the best of antitrust plaintiffs. First, their incentives are almost always questionable. In most cases they sue because they are injured by increased efficiency. But, on the other hand, they are also the best antitrust plaintiffs as they feel the injury in much more perceptible ways that consumers do (ABA, 2007).

The value of consumer suits has been greatly exaggerated. In most antitrust cases, they are not as well prepared to prove their claims as competitors are. Although class actions have been effective against cartels and some tying arrangements, they have not been very successful in challenges to exclusionary prices.

According to Ross (2009), in recent years, agricultural producers have expressed concern about competitive conditions, levels of concentration, and about the impact on farmers of particular mergers and acquisitions. Continuous development and refinement of policy positions for description of agriculture-related enforcement activity by antitrust bodies was useful to US agricultural markets as agricultural marketplace worldwide is undergoing significant changes.

The changes include major advances in technology and productivity, an increasingly global marketplace, changes in business relationships between producers and their packers or processors, and in many markets, a trend toward consolidation or vertical integration. These concerns and changes are shared by farmers in both developed

and least developed countries alike, despite the observable development difference in their agro markets.

In Tanzania, some studies have been undertaken to find out lasting stability of the weakening market competition for the major traditional cash crops in Tanzania, they include Gibbons on cotton, Temu (1999) on Coffee, Polton (2003) on cashew. To a greater extent, these studies and more others have been very helpful in understanding the extent of the market failures albeit with minimal integration of the research findings into the mainstream competition policy and law that oversee anticompetitive behavior of the market participants.

In FIAS (2002) it is reported that International Finance Corporation in collaboration with World Bank through Foreign Investment Advisory Services (FIAS) held a review on foreign direct investment and competition in Tanzania. The review aimed at strengthening competition position by providing the Government with strategies to better market environment. The review focused on three main areas as follows:

- (i) Assessement of barriers to entry;
- (ii) Competition related issues in strategic areas/sectors; and
- (iii) Assessement of the legal and institutional framework.

The tea sector showed to have 29,000 peasants were found in 8 different regions. Also there are big estates wholly owned by foreign investors and they account for 90% of all tea produced in the country. These companies are also engaged in tea processing among 23 processing companies that exist. Furthermore, there were 8 industries for processing and packing tea. Therefore this sector indicated to have

more players compared to other sectors. The tea sector also showed to be a good example for increasing farmer's income because it involved every farmer in the processing level.

Thus, the profit obtained after sales was distributed to the farmers as additional earnings different from other crops. However, this sector indicated to have some competition problems such as ban on exportation of unprocessed tea; nuisance taxes, fees and local authorities licences were too many.

The report recommended relaxation of administrative procedures on issuance of licences which hike market entry costs. It also recommended conduct of a research to establish the exact cause of the wide gap between export price and farmers' price. Invariably, called for FCC to be at the forefront to establish the determinants of the reduction of farmers' share into the export price over time.

In Kingwala, (2015) it was reported that both Fair Competition Act, 2003 and Tanzania Communication Regulatory Authority Act fulfill the same goal of protecting consumers of communication services and effective consumer choice. However it was reported that the existing laws have shortcomings as far as the issue of price fixing in communication industry is concern to the effect that the Tanzania Telecommunication Regulatory Authority (TCRA) is not independent in exercise of its functions, adding that conflicting laws in their objectives cannot be effective unless they are free from possible evasive loopholes. It was further alluded that TCRA should be disentangled from its operational difficulties for attainment of its

intended goals which include having technical competition experts so as to make their own investigation and decision on the competition matters of communications descend.

In Ugula (2013), it was reported that the FCA remains substantially untested on its substantive provisions of anti competitive agreements, misuse of market power and regulation of mergers. More specifically, it is reported that the FCC has not in its nine years of operation by then; not dealt with any cartel case. The report touted for bodies entrusted with the statutory duty of administering competition justice in Tanzania to engage in concerted effort that aim at simplifying the competition adjudication processes that shall ensure increase in the enforcement of competition matters with a view to deter anti competitive conducts in Tanzanian markets.

In FCC (2014), it is reported that in the period between 2006 and 2014, there were 101 merger notification lodged before the FCC; out of which 12 (11.8%) were from the agro allied markets. The low magnitude of applications from the agro allied markets was construed to imply that either there were no competition issues in the agro allied markets or there was still a lot to be done given the architecture of the agricultural markets and the potential susceptibility to anticompetitive conduct attached thereto. It was further asserted that there was a growing need for closer monitoring of the agriculture sector's competition issues.

In FCC (2015) it was reported that evidence from the analysed price data in the tobacco leaves markets showed the two dominant buyers in the market who are members of one trade association i.e. the ATTT had intentionally fixed price/bought

the tobacco at a price below Cost of production (CoP) contrary to Tobacco Industry Act and FCA, 2003 abetted by the loopholes of the disconnect of the two legislation that are to curb the price fixing menace in the markets. Since the tobacco sector in Tanzania is also under prudential regulation of a crop board, it is worth for this study to learn from such a reported experience.

According to CTC, (2015) the Competition and Tariffs Commission (CTC), the Zimbabwean competition authority has on average, initiated between 7 to 9 restrictive business practices cases annually, for which more than 50% are closed for lack of evidence. Only a few out of the remaining 50% get to be heard on the merits and final decision reached by the CTC. Regarding mergers, records show that between 2005 and 2010, an average of 8 to 10 notifications are lodged at the CTC. The report further asserts that much as the performance of CTC has been upbeat, there remain a substantial number of issues that may require either introduction or amendments in the current Competition Law. The low level of reported cases has been partly caused by conflict of law with sectoral regulator laws that have landed CTC in court with the electricity regulator. This experience shows that competition laws require development so as to ensure effective enforcement of competition matters in sectors of the economy that are statutorily foreclosed in terms of entry and exit and pricing among other monopolistic tendencies.

World Bank (2013), reports that in Rwanda, the passage of a crucial reform on green leaf tea pricing is boosting tea farmers' earnings and expanding production in this key sector. The reform brings into effect a new pricing mechanism set on the

international market price of processed tea, the exchange rate, and the conversion rate from green leaf to processed tea. When market prices were high under the previous mechanism, tea factories would reap the benefits, but farmers did not garner higher earnings. This new mechanism links the price of green leaf to the auction price and motivates farmers to produce higher volumes of tea. The Rwandan case is almost a replica of the Tanzanian case in this study and thus making the finding useful in this study.

The World Bank (2015) has also reported that there is need for streamlining of the regulatory environment for agribusiness competition in priority agribusiness value chains in a holistic manner and prioritizing areas that are critical and most recurring regulatory issues constraining agribusiness development in client countries. Such issues include regulatory simplification to tackle monopolistic practices, constraints to competition, and opaque public sector practices in the sector with a view to open markets to increased domestic and foreign investment. This in turn will foster competition for growth and investment.

In Wang'ombe, (2013) it was reported that unsuitable institutional framework and outdated regulatory framework led to distorted markets along the maize value chain. In turn the supply side experienced low productivity at the farmer level to the detriment of consumers who suffered high final prices for maize. The report further provides that in 2010 commodity price volatility led to agitation for price controls in rice, sugar, wheat and maize flour, among others by the Legislature. The Competition Authority was of the view this legislation would not benefit the poor

more as intended and engaged in an advocacy spree that was met with a positive outcome that the President rejected the bill as goods recommended for price controls represented 15% of the consumption basket of the poor households, 44% for middle and 35% for upper income households. This is a lesson that acting timely and with required expertise is of essence to prevent further distortions by way of legislation which was meant to cure the menace at hand.

The foregoing is summarized to the effect that competition and economic regulation are often referred to as two sides of the same coin as they seek to address a common good in the society by fighting misuse of market power in protection of the consumer. As moral hazards cause market failures that require enforceable corrective measures, is essential that an economic law; providing for the behavior of economic agents where economics as a science provides the tools with which to analyze markets and competition within them.

Nevertheless, there have been several efforts to cure the effects of the observed market failures since mid-1980's; most of these efforts have been policy oriented and not towards strengthening of competition enforcement per se. Comprehensive review of empirical literature was conducted in the course of the present study; none of the studies have addressed the issue on how sectoral laws and competition law interlink to provide a plausible competition enforcement model in the identified relevant markets using the Competition Assessment Framework (CAF). This is the knowledge gap that the current this study seeks to address.

2.10 The Conceptual Framework

The framework was used to guide the study, especially on the interconnectedness of the variables including their identification. It also provide for the understanding of the study from the conceptual perspective so as to nurture the thinking of the researcher in the course of analysis as well as providing for scope of the analysis.

The framework presents the logical flow of the study from the conceptual perspective. The competition enforcement mechanism of the study traces its genesis from the Competition policy and law, sectoral legislation, subordinate legislation, Government policies and linkages and synergies found therein. These in turn shape the market structure i.e. competitive, monopsonistic competition and their distinguishing attributes as described in Table 1. Invariably the characteristics of the players (buyers and farmers) in the structure they are found in are equivocally shaped by the do's and don'ts together with their typical accompanying moral hazards. The performance of the farmers as expressed in gross margins is dependent on two factors namely, those that they have control with such as agronomic practices, acreage, yield and social capital. On the other hand there are issues that impact the farmers (without them having control upon) but are buyer driven such as dominancy of the trading firms they have to engage with, market shares, buyer associations, unilateral and coordinated tendencies which if improperly regulated or completely unregulated are all geared towards farmers demise.

At a crucial stage buyer-farmer relationship, the two key players engage in trade/business that is highly statutorily regulated by variant legislation. Issues that come into play include price determination, bargaining power of players, social

relations, knowledge sharing, contract enforcement mechanisms, communication reliability, input supply, access to loans and extension services. The interrelation arising therefrom is presented as marketing chain/channel and the resultant conduct of the players is referred to as market characteristics.

It is at this continuum of buyer-farmer relationship, marketing chain/channel and market characteristics that the study focus in relation to the economic and competition governance structures' efficiency towards lowering of competition harm that hit farmers who do not have control over the vagaries they are faced with. The efficiency of the enforcement model that oversee the out of control of framers' issues such as restriction of where to sell their green tea leaves, limited choice of which buyer to sell to and most crucial at which price to sell their green tea leaves entail the heart of this study and thus its focus.

The summary of causality is complex because of the mutual reinforcements and complementarities that exist among the players and various stages. Nevertheless, the general hypothesis is that gross margins (performance/efficiency) will be high under the auspices of a robust competition enforcement model in the tea markets.

The following chapter discusses the theory and practice of the legal framework governing competition in the Tanzanian tea sector in complement to the foregoing.

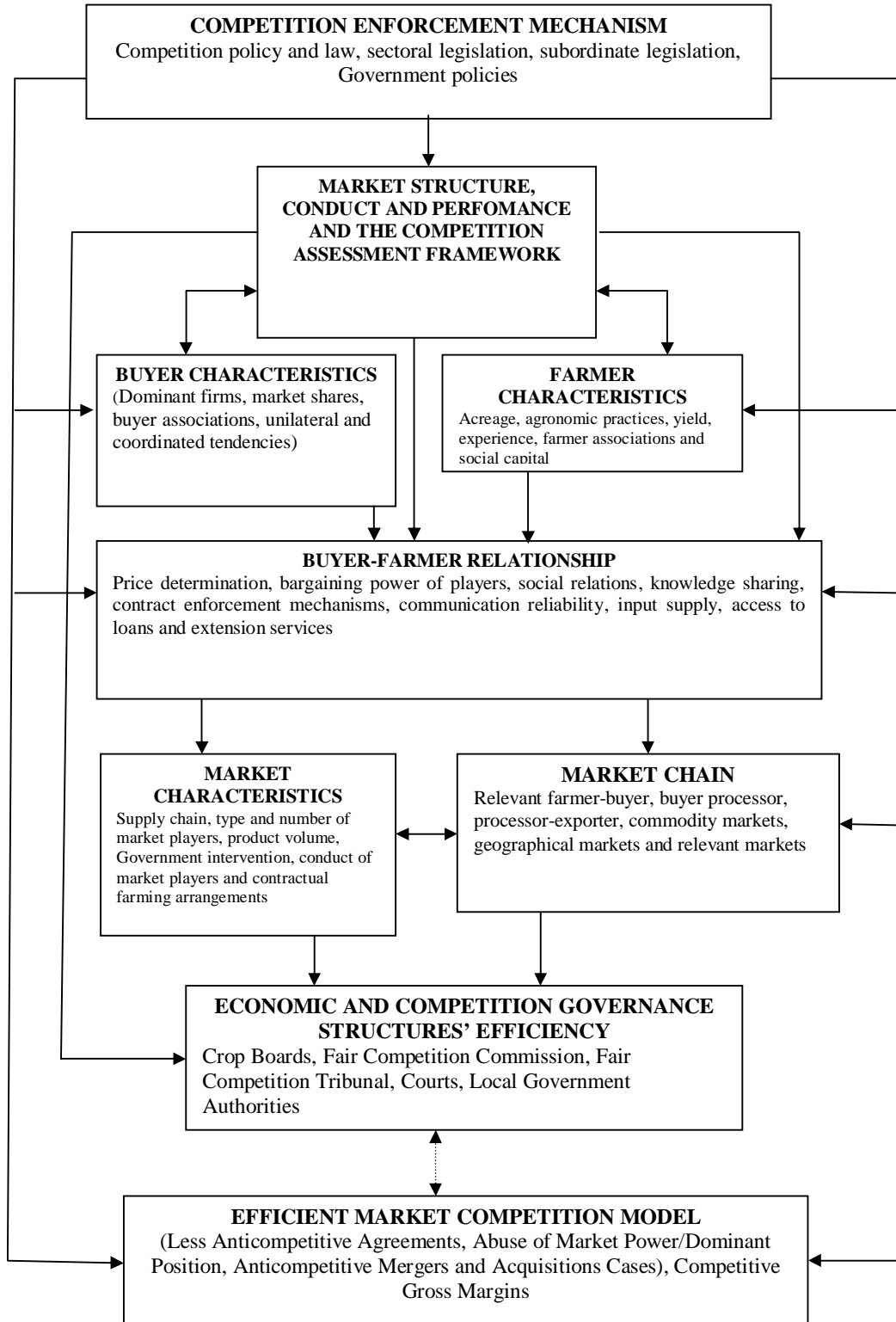


Figure 6: Conceptual Framework

CHAPTER THREE
LEGAL FRAMEWORK GOVERNING COMPETITION IN THE
TANZANIAN TEA SECTOR

3.1 Chapter Overview

The chapter covers theoretical and practical legal issues in competition that complement the foregoing economic based review of competition matters. As earlier asserted, competition is a discipline that encompasses both economics and law, to the effect that economic principles propagated in the theory of the firm and in particular the perfectly competitive market model are coded as laws so as to limit the moral hazards that often occasion market failure by private players. On the other side, the laws so made have also in several occasions occasioned the same market failure that they were meant to curb. This chapter seeks to provide the said provisions of law in the context of the foregoing literature review so as to have a complete dimension of competition covering both the economics and law sides of competition.

3.2 Theoretical Review of Competition Law

Much as classical theory rejected large firms, tainting them as destructive and evil to social welfare, the theory fell short of devising ways to tame the growing social welfare devil that grew to become the way of life in modern world. While other countries particularly European, had some form of regulation on monopolies and cartels, the U.S. codification of the common law position on restraint of trade had a widespread effect on subsequent competition law development. Modern competition law begins with the United States legislation of the Sherman Act of 1890 and the

Clayton Act of 1914. Over the years, competition law has gone through phases of renewed attention and legislative updates around the world.

Different countries enact such laws considering the economic, social and legal contexts with which the law will operate. Notwithstanding the difference in the economies, all competition laws would have the following features as provided by the UNCTAD model law in Table 3. The Table has also reflected Tanzanian Competition Law called Fair Competition Act No. 8 of 2003 (FCA) compatibility with the model law.

Table 3: Compatibility of the FCA with the Model Law

SN	Model Law Provision	Provision in FCA
1	Title of the law	Section 1
2	Objectives or purpose of the law	Section 3
3	Definitions and scope of applications	Section 2
4	Abuse of dominant position/market power	Section 10
5	Notification, investigation and control of mergers	Section 11
6	Anti competitive agreements	Section 8
7	Relationship between competition authorities and sector regulators	Section 96
8	Establishment, functions and powers of the competition authority	Section 62, 65, 83
9	Powers of enforcement	Section 59, 60, 68, 70, 71, 88
10	Sanctions and remedies	Section 59, 60
11	Appeals	Section 61

Source: UNCTAD, (2007)

From the earlier definition of competition policy and law; such laws deal with essentially three concerns, namely anticompetitive agreements, abuse of dominant position/market power, notification, investigation and control of mergers. This section discusses the theory behind the underlying competition concerns from both the economic and legal perspectives.

3.3 Anti-Competitive Agreement

Most of competition issues are in line with economic theories. In economics, collusion is found in a situation whereby firms' prices are higher than the competitive benchmark overtime among competitors (Massimo, 2006). In other words, it is a situation where the prices in a seemingly competitive market, closely resemble that of a monopolistic market. Collusion can be either explicit (organised) or tacit (implied); economic principles alone cannot provide a distinction between the two, unless abetted by the legal dimension of competition. According to Friederiszick and Maier-Rigaud (2007), organised collusions are often harmful hence mostly scrutinised.

Cartels refer to cases of multiple producers acting in agreement that allow them to exercise monopoly power (Khemani and Shapiro, 1993). Largely, cartels refer to shady behaviour of competitors in which they co-ordinate explicitly or tacitly to regulate markets so as to restrict competition. These agreements are frequently verbal and, although they can be harmful to competition, are difficult to detect. Increase in cartel practices is partly due increasing transparency in most market, which makes it easier for cartel members to have access to sales and market share data of their competitors who eventually become cartel members (Levenstein and Suslow, 2006).

3.1.1 Economics of Cartels

In a period of high demand whereby capacity constraints, high concentration index, low elasticity of demand are observed, bigger firms have incentives to join the cartel as they cut their production to maximise profits through price increases and vice versa during high season. On the other hand, during the period of low demand,

smaller firms have greater incentives to remain outside the cartel as they would be in an advantageous position (become more efficient in terms of economies of scale because of full capacity utilisation) to sell their products without the risk of fixing prices and vice versa during high season. Generally, cartels persist among firms with similar cost functions, thus facing similar production and marketing constraints hence incentives for the participating firms to create and remain in the cartel (Levenstein and Suslow, 2006).

According to Arora and Sarkar (2008) cartels usually become deterrents to new entrants into markets, or force outsiders to join the cartel by mounting fierce price wars to non-members. Cartels also punish the defectors for their non-compliance. Cartel members agree on price fixing, total industry output, market shares, allocation of customers, bid-rigging, setting common agencies and allocating territories, lobbying to the Government, division of profits or a combination of these actions to gain supernormal profits. Table 4 summarises the factors affecting sustainability of cartels.

Table 4: Impact of Market Factors on Cartel Sustainability

SN	Factor	Impact on Cartel Sustainability
1	Small number of firms	Positive
2	High concentration	Positive
3	Similar cost functions of firms	Positive
4	High entry and exit barriers	Positive
5	Low price elasticity of demand	Positive
6	Discontent with the existing performance	Positive
7	Trade association	Positive
8	Mutual trust	Positive
9	Homogeneous goods	Positive
10	Market transparency	Positive
11	Threat of legal sanctions	Negative
12	Large powerful buyer	Negative
13	Demand fluctuations	Negative

Source: Arora and Sarkar (2008)

3.1.2 Legal Aspects of Cartels

Depending on the legal text of a respective countries law, the basic element to be proved in a cartel case is an agreement. That there was a form of agreement among competitors and that content of the said agreement materially restrains competition and is restricted by law.

There are usually two forms of prohibited agreements, those which are prohibited per se (under no circumstances, they can be allowed) and those that can be allowed if they bring more benefit than the detriments they cause to competition (rule of reason). Some jurisdictions do not have per se prohibitions e.g. USA while Tanzania is among those countries having per se provisions.

In the Tanzanian context where the study was carried out, the FCA provides for anti-competitive agreements as follows:

- (i) Agreements which are anticompetitive, but can be allowed if they pass the test that the benefit the agreements bring outweigh detriments to competition (Rule of Reason) provided under Section 8 of the FCA.

In such agreements, the Commission will establish the harm caused by the proposed agreements on competition, consumers and the economy and weigh the harm against the projected benefits resulting from the agreement. If the benefits outweigh the harm the Commission may allow the agreement to proceed and vice versa. Decision of the Commission will heavily depend on the cost-benefit analysis results and the economic arguments advanced by both the applicant and the Commission's economists for and against the proposed agreement.

- (ii) Agreements which the FCA prohibit under no circumstances (per se prohibition) provided under section 9 (1) of the FCA. Agreements prohibited are:
- (a) Price fixing between competitors.
 - (b) Collective boycott by competitors.
 - (c) Output restrictions between competitors; or
 - (d) Collusive bidding or tendering.

In such agreements the Commission will investigate the possibility of existence of an agreement between competitors by deploying the market factors in Table 1. Most of the factors require deployment of economic principles to establish their existence. Decisions of the Commission are mostly based on the evidence to prove existence of an agreement. The economic evidence will only corroborate that of existence of an agreement.

3.2 Abuse of Dominant Position/ Market Power

According to Burling (2004), dominant position relates to a position of economic strength enjoyed by an undertaking, which enables it to prevent effective competition being maintained on the relevant market by affording it the power to behave to an appreciable extent independent of its competitors, its customers and ultimately of the consumer. Such a position does not preclude some competition, which it does where there is a monopoly or quasi-monopoly, but enables the undertaking which profits by it, if not to determine, at least to have an appreciable influence on the condition under which that competition will develop, and in any case to act largely in disregard of it so long as such conduct does not operate to its detriment.

Abuse of dominance refers to a behavior which, through recourse to methods different from those which condition normal competition in products or services on the basis of the transactions of commercial operators has the effect of hindering the maintenance of the degree of competition still existing in the market or the growth of that competition. Abusive behavior can be exclusionary practices e.g. price discrimination or an exploitative practice such as charging excessive prices to buyers (or extorting too low prices from suppliers). Prohibitions differ across jurisdictions/economies depending on nature and levels of market development e.g. USA does not prohibit charging excessive prices while the EU and South Africa does (Burling, 2004).

Competition laws do not punish creation of dominant position but its abuse. A firm that builds dominance/market power however strong through innovation, investment, and marketing activities, this is legally allowed. It is only abuse not the creation of a dominant position that is forbidden. It makes sense from economic efficiency standpoint that a firm should not be punished because they are better, more successful or even luckier than others as this would reduce incentive for this firm (Massimo, 2004).

In Tanzania, Abuse of Dominance/Market power is provided in Section 10 (1) of the Fair Competition Act No. 8 of 2003.

“A person with a dominant position in a market shall not use his position of dominance if the object, effect or likely effect of the conduct is to appreciably prevent, restrict or distort competition”.

Sections 5 (6) of the Fair Competition Act No. 8 of 2003 provide that:

“a person has a dominant position in a market if both (a) and (b) apply:

- (a) Acting alone, the person can profitably and materially restrain or reduce competition in that market for a significant period of time; and
- (b) The person's share of the relevant market exceeds 35 percent”.

Generally, challenges that lawyers and economist for the plaintiff, defendant as well as the decision makers face in dealing with cases brought under Section 10 of the Fair Competition Act No. 8 of 2003 are elements to prove “acting alone”, “materially” restraining competition and “appreciably” prevent, restrict or distort competition as provided in the relevant sections. More elements to be proven in abuse cases are as discussed in respective types of abuse as provided hereunder. The types of abuse relevant to the current study include the following:

3.2.1 Exclusive Dealing

Refers to conduct by a dominant firm in a relevant market that requires or induces customers or suppliers to deal solely or predominantly with the dominant firm. It operates as demonstrated with the two examples. The manufacturer or customer agrees that customer will buy a product only from this manufacturer, or that manufacturer will supply a product only to this customer, or both. Alternatively, the manufacturer and dealer agree that the dealer will not carry products of other manufacturers, or Manufacturer agrees not to supply products to competing dealers, or both. In such practices, there may or may not be a contract but a customer may simply refuse to deal with a manufacturer that sells to rival customers or a manufacturer may simply refuse to deal with a distributor that carries rival products. Such exclusive contracts may cover a short period of time or many years (ABA, 2007).

3.2.1.1 Economics of Exclusive Dealing

Economics literature on exclusive dealing shows that exclusive dealing can be either efficient or inefficient (causing harm to competition). The economic challenge underlying such practice is the “Basic Tradeoff” of the effects of such practice. Exclusive dealing changes the nature of price competition; as firms compete for the right to be the exclusive supplier and intensify competition in the market thus lower prices. The basic tradeoff was between lower prices and reduced product variety as result of the exclusive contract (ABA, 2007).

Pro competition effects of exclusive dealing include increased competition between manufacturers to supply all of the needs of particular dealers, retailers, or customers may be more intense and result in lower prices. Exclusive dealing is also known for enhancing incentives for suppliers and dealers to make production and capacity expansion investments. Suppliers may make investments that increase demand for the product, leading to free-riding. At this point, dealers may invest too little in their relationships with a seller without an exclusive arrangement, hence making explicit contracts infeasible in exclusive deals. Exclusive contracts are common in competitive markets in which buyers and sellers do not have substantial market power (ABA, 2007).

There are also potential anti competition effects of exclusive dealing; static effects include raising product prices in the long run and reduced product variety in the short run. Dynamic effect of exclusive dealing is mostly deterrence of entry (or diminish rival investment incentives) by denying rivals economies of scale as products require multiple buyers and economies of scale in production to sustain in the market. In

considering the “Trade off” discussed earlier, two scenarios emerge as described hereunder.

(i) Tradeoff when Suppliers are Symmetric

Exclusive dealing may intensify competition when the rival suppliers are relatively symmetric. Exclusive dealing can also reduce product variety; however competition policy typically avoids variety issues, since unfettered competition may lead to too much or too little variety relative to the social optimum, making analysis of this tradeoff complicated as it would depend on a variety of uncontrollable factors (ABA, 2007).

(ii) Tradeoff when Suppliers are Asymmetric

Exclusive dealing may reduce competition when rival suppliers are relatively asymmetric. If one rival is much larger than the other, the small rival cannot realistically compete to become the exclusive supplier. If the small firm competes less vigorously, the large firm may do the same. In weighing the effects of exclusive contracts, there is no simple rule of thumb. Net effect depends on details of the market such as relative demands, own- and cross-elasticities, nature of feasible contracts, economies of scale and transaction costs. In most cases, it has been found that less likely will increased competition outweigh the loss of variety (ABA, 2007).

3.2.1.2 Legal Aspects of Exclusive Dealing

Basic legal elements that need to be considered are whether the alleged firm has the following:

(i) Dominance

Depending on the relevant legislation, dominance is established by market shares. In Tanzania, Section 5 (6) of FCA provides that a person has a dominant position in a market if both (a) and (b) apply:

- (a) Acting alone, the person can profitably and materially restrain or reduce competition in that market for a significant period of time; and
- (b) The person's share of the relevant market exceeds 35 percent.

(ii) Exclusive Dealing Arrangement

No formal contract requirement to prove either there exist a de jure or de facto exclusivity. Percentage of purchases or sales involved is not limited to arrangements covering 100% of purchases/sales, generally no presumptions or safe harbors in assessing such arrangements as all vulnerable to exclusivity. Duration of the arrangement may be considered in mitigation of penalties in case of conviction. Exclusivity arrangements requested by the non-dominant party are “not per se illegal” as both parties are likely to obtain pro-competitive efficiencies (ABA, 2007).

(iii) Anticompetitive Effects

Anticompetitive foreclosure which is an act of hindering or eliminating actual or potential competitors' profitable access to the market is what is prohibited by competition law. Furthermore, it should be noted that, it is harm to competition process and consumers, not just competitors that is sought to prove a case. Factors in assessing foreclosure are market coverage, duration of the obligation, alternative sources and practicality of switching as well as entry and expansion barriers the exclusive contract bears (ABA, 2007).

(iv) Justifications and Defenses

Defendants will most probably raise the most widely-recognized efficiencies of relationship-specific investments, facilitating innovation or reduced transaction costs in their defense in the course of justifying the alleged exclusivity. Generally, efficiencies that result in lower costs, better products or improved quality do not meet competition cases defense standard and are not recognized (ABA, 2007).

3.2.3 Refusal to Deal

This conduct refers to unilateral, unconditional refusals (actual or constructive) to supply (or continue to supply) a rival in the downstream market. Upstream market power is necessary in establishing a refusal to deal violation. Theoretically, it is important to acknowledge that without the profits from the downstream sales, the firm may not have invested in the upstream asset. If rival firms learn of the profits, and be able to use the leading firm's assets, they may not invest in their own assets thus bring about free rider problem. Refusal to deal may be either pro-competitive or anti-competitive (ABA, 2007). In analyzing refusal to deal cases, a few questions are usually asked as follows:

- (i) Does the firm have monopoly power?
- (ii) Will the refusal to deal cause prices to be raised or maintained at supra-competitive level?
- (iii) Is there another market where the entrant is an actual or potential competitor of defendant?

3.3 Mergers

According to ABA (2007), generally mergers are prohibited if they either create or strengthen a position of dominance in a given relevant market. The merger regulation fraternity is often characterized by notifications and thresholds thereof for which consummating a notifiable without notifying the requisite authority amounts to a punishable offence under completion law.

3.4 Provision of the FCA in Relation to Competition in the Tea Sector

3.4.1 The Agreements' Exemption Test

Since the regulation of agreement encompass legal, competition and market aspects; it is important to take cognizance of Section 2 of the FCA, further provides that "competition" "market" and "dominant position in a market" are economic concepts and, subject to the provisions of this Act (FCA), shall be interpreted accordingly. The exemptions for agreement are applied for under Section 8 read together with Section 12 of the FCA. It requires rule of reason in determining whether the agreement merit an exemption or otherwise as discussed hereunder. The test is provided in Section 8 of the FCA as follows:

Subsection 1 provides that “A person shall not make or give effect to an agreement if the object, effect or likely effect of the agreement is to appreciably prevent, restrict or distort competition”.

Subsection 2 provides that “An agreement in contravention of this section is unenforceable except to the extent the provisions of the agreement causing it to be in contravention of the section are severable from the other provisions of the agreement”.

Subsection 3 provides that “Unless proved otherwise, it shall be presumed that an agreement does not have the object, effect or likely effect of appreciably preventing, restricting or distorting competition if none of the parties to the agreement has a dominant position in a market affected by the agreement and either (a) or (b) applies:

- (a) The combined shares of the parties to the agreement of each market affected by the agreement is 35 per cent or less; or
- (b) None of the parties to the agreement are competitors”.

Subsection 4 provides that “For the purposes of this section, in determining whether the effect or likely effect of an agreement is to appreciably prevent, restrict or distort competition, the fact that similar agreements are widespread in a market affected by the agreement shall be taken into account”.

Subsection 5 provides “This section does not apply to an agreement to the extent it provides for a merger”.

Subsection 6 provides that “For the purposes of sub-section (1), an object is the object of an agreement if it is a significant object of the agreement even if it is only one of a number of objects of the agreement”.

Subsection 7 provides that “Any person, who intentionally or negligently acts in contravention of the provisions of this section, commits an offence under this Act”.

Furthermore, Section 12 of the FCA provides as follows:

Subsection 1 provides that “The Commission may, upon the application of a party to an agreement, grant an exemption for that agreement, either unconditionally or

subject to such conditions as the Commission sees fit, if the Commission is satisfied in all the circumstances that both paragraph (a) and (b) apply:

- (a) the agreement either contravenes section 9 or has, or is likely to have, the effect of appreciably preventing, restraining or distorting competition; and
- (b) the agreement results or is likely to result in benefits to the public in one or more of the following ways:
 - (i) by contributing to greater efficiency in production or distribution;
 - (ii) by promoting technical or economic progress;
 - (iii) by contributing to greater efficiency in the allocation of resources; or
 - (iv) by protecting the environment; and the agreement:
 - (v) prevents, restrains or distorts competition no more than is reasonably necessary to attain the benefits; and
 - (vi) the benefits to the public resulting from the agreement outweigh the detriments caused by preventing, restraining or distorting competition”.

Subsection 2 provides that “The Commission may grant a block exemption, either unconditionally or subject to such conditions as the Commission sees fit, for all agreements falling within a class of agreements if the Commission is satisfied in all the circumstances that paragraph (a) of sub-section (1) shall not apply to the class of agreements”.

Subsection 3 provides that ”When granting an exemption under this section, the Commission shall fix a period, not exceeding 5 years from the date the exemption is granted, as the period of the exemption”.

Subsection 4 provides that “An agreement exempted under this section is not prohibited by section 8 or section 9 during the period of the exemption”.

Subsection 5 provides that “For the purposes of this section, "agreement" includes proposed agreement and 'party' includes party to a proposed agreement”.

Subsection 6 provides that “The Commission may revoke or vary an exemption at any time during the period of the exemption if it is satisfied that circumstances since the grant of the exemption have materially changed or the exemption was granted wholly or partly on the basis of false, misleading or incomplete information”.

3.4.2 The Merger Test

Since the regulation of mergers is a both a competition and market related phenomena, it is important to take cognizance of section 2 of the FCA further provides that "competition" "market" and "dominant position in a market" are economic concepts and, subject to the provisions of this Act (FCA), shall be interpreted accordingly. The merger test is provided in section 11 (1) that “A merger is prohibited if it creates or strengthens a position of dominance in a market”.

Section 11 (2) provides that “A merger is notifiable under this section if it involves turnover or assets above threshold amounts the Commission shall specify from time to time by Order, in the Gazette, calculated in the manner prescribed in the Order.”

Section 11 (6) provides that “Any person who intentionally or negligently acts in contravention of the provisions of this section, commits an offence under this Act”.

Section 60 (1) provides that “Where a person commits an offence against this Act (other than under Part VI, Part VII or sections 58, 59 or 88) or is involved in such an

offence, the Commission may impose on that person a fine of not less than five percent of his annual turnover and not exceeding ten percent of his annual turnover”.

Section 60 (8) provides that “The Commission may act upon an offence at any time within six years after the commission of the offence”.

3.4.2.1 Fair Competition Commission (Threshold for Notification of a Merger)

Order, 2007

The Order is made pursuant to section 11(2) of the FCA, and provides as follows:

“This order may be cited as the Fair Competition (Threshold for Notification of a Merger) Order, 2006, and shall be deemed to have come into effect on 10th March, 2006. Order 1 (2) it is hereby specified that the threshold for notification of a merger is Tanzania Shillings Eight Hundred Million only (TZS 800,000,000/=). The calculation of the threshold shall be based on the combined market value of assets of the merging firms”.

3.4.2.2 The Fair Competition Commission Procedure Rules, 2013

Rule 33 (1) provides that “A firm which intends to acquire control through a merger shall notify the Commission of that intended merger by filing a notification under Section 11(2) of the Act.

3.4.3 Review of Provision for Inconsistency of the FCC with Other Laws

Section 96 provide for inconsistency of the FCA with other laws to the effect that:

Subsection 1 provide that “Subject only to this section, this Act applies to all persons in all sectors of the economy and shall not be read down, excluded or modified (a) by any other Act except to the extent that the Act is passed after the

commencement of this Act and expressly excludes or modifies this Act; or (b) by any subsidiary legislation whether or not such subsidiary legislation purports to exclude or modify this Act”.

Subsection 2 provide that “A person shall not contravene this Act by reason only of engaging in a conduct, unless a provision of an enactment specified in sub-section (3): (a) requires the person to engage in the conduct or conduct of that kind; or (b) authorizes or approves the person engaging or refraining from engaging in conduct of that kind.

Subsection 3 provide that “The enactments referred to in sub-section (2) are: EWURA Act, 2001 SUMATRA Act, 2001 the Tanzania Communications Regulatory Authority Act, 2003 the Tanzania Civil Aviation Authority Act, 2003 and sector legislation referred to in the sector legislation, enactments for the protection of the environment; and, any subsidiary legislation or instrument under any of the aforementioned Acts”.

Subsection 4 provide that “Where the Commission is of the opinion that, any conduct required, authorised or approved by a regulatory authority under an enactment referred to in sub-section (3) would be in breach of this Act if sub-section (1) did not apply to the conduct the Commission, shall report the matter to the Minister”.

Subsection 5 provide that “Where the Minister receives a report from the Commission under sub-section (4), he may direct the relevant regulatory authority to

take the necessary steps to ensure that the conduct described by the Commission is not required, authorised or approved by the regulatory authority.

Subsection (6) “A person shall not contravene this Act by reason only of engaging in conduct required in order to comply with an enactment other than an enactment referred to in sub-section (3) of this section’.

It is observed that the provision has expressly mentioned of sectors that have been exempted from the operation of the Fair Competition Act, 2003 which means the rest of the sectors are its subjects and for that matter they are bound to comply with all the provisions irrespective of the nature of the sector and the provision of their respective enabling statutes.

Tea sector is not among the exempted which means the statutory provisions of the tea sector legislation that are contrary to some basic competition principles, such as controlled price determination and restrictions to market access continue to harm the respective market. An alternative approach to the failed orthodoxies is at this stage inevitable thus the motivation for this study.

3.4.4 Provision of Selected Sector Specific Provision on Competition Matters

In Tanzania there no practise of economic regulation in any of the agricultural markets, this has necessitated that the study to borrow a leaf from a closely distant sector which also deal with a product for benchmarking purposes. To this effect, petroleum has been selected for the purpose.

3.4.4.1 The Energy and Water Utilities Regulatory Authority Act Inconsistency with the FCA

Section 38 of the EWURA Act provide as follows:

Subsection 1 “A person shall not contravene a provision of the Fair Competition Act or the Standards Act by reason only of engaging in conduct or refraining from engaging in conduct if this Act, a sector Act or any subordinate legislation or instrument under any of the aforementioned Acts (a) requires the person to engage or refrain from engaging in the conduct or conduct of that kind; or (b) authorises or approves the person engaging or refraining from engaging in conduct of that kind”.

Subsection 2 “Where the Commissioner for Fair Competition is of the opinion that any conduct required, authorised or approved by the Authority (a) would be in breach of the Fair Competition Act if subsection (1) did not apply to the conduct; and (b) the conduct is against the public interest, the Commissioner shall report the matter to the Minister.

Subsection 3 “Where the Minister receives a report from the Commissioner for Fair Competition under subsection (2), he may direct the Authority to take the necessary steps to ensure that the conduct described by the Commissioner is not required, authorised or approved by the Authority”.

Sections 29 and 38 of the EWURA Act provides for appeals of its decisions to be referred to the Fair Competition Tribunal (FCT).

Power to Regulate Rates and Charges**Section 17 provides as follows:**

Subsection (1) “Subject to the provisions of sector legislation and licences granted under the legislation, the Authority shall carry out regular reviews of rates and charges”.

Subsection (2) “In making any determination, setting rates and charges or establishing the method for regulating such rates and charges, the Authority shall take into account– (a) the costs of making, producing and supplying the goods or services; (b) the return on assets in the regulated sector; (c) any relevant benchmarks including international benchmarks for prices, costs and return on assets in comparable industries; (d) the financial implications of the determination; (e) the desirability of establishing maximum rates and charges, and in carrying out regular reviews of rates and charges; (f) any other factors specified in the relevant sector legislation; (g) the consumer and investor interest; and (h) the desire to promote competitive rates and attract market; (i) any other factors the Authority considers relevant. (3) The Authority shall publish in the Government Gazette all the rates, tariffs and charges regulated by the Board”.

3.4.4.2 The Petroleum Act**Prohibition against Activities Contrary to Principles of Fair Competition**

Section 24 provides as follows:

Subsection (1) “Subject to the provisions of the Energy and Water Utilities Regulatory Authority Act, all petroleum operations shall be subject to the provisions

of the Fair Competition Act in relations to (a) The formation of cartels; (b) Barriers to entry and exit; (c) Abuse of dominant position and market power; (d) Formation of mergers and acquisitions for anti- competitive purposes; (e) Attempts to control prices; (f) The creation of artificial shortages of products or services; and (g) Other restrictive trade practices as defined in that Act, with intention to contravene the principles of fair competition or impeding the functioning of a free market for petroleum products within the country.

Subsection (2) “Subject to the provisions of the Fair Competition Act, all participants in the supply chain shall sell products and offer services to all interested persons without undue delay and without any form of discrimination by means of quality, quantity, price and any other form of discrimination. (3) The Fair Competition Commission shall monitor conditions of the market and trade practices of participants in the supply chain”.

Section 52 of the Petroleum Act provides for appeals of the decisions of EWURA to be referred to the Fair Competition Tribunal (FCT).

3.5 Provisions of the Tea Industry Legislative Framework in Relation to Market Competition

3.5.1 The Tea Industry Act No. 3 of 1997

The Tea Act No. 3 of 1997 and came into force on the 1st October 1997 following the separation of the regulatory and development functions of the then Tanzania Tea Authority (TTA). It is entrusted with the mandatory responsibility of regulating the tea industry in Tanzania.

Section 2 of the same Act defines “green leaf tea” to mean a leaf detached from tea plants but not dried or processed in any way.

Section 5 (4) of the Tea Industry Act No. 3 of 1997 (as amended in 2009) provide for the main functions of the act follows:

- (a) Advise the Government on the policies and strategies for the development of the tea industry.
- (b) Regulate and control the quality of tea and tea by-products.
- (c) Collect, refine, maintain, use or disseminate information or data relating to the tea industry.
- (d) Monitor the production and exportation of tea.
- (e) Regulate processing, exportation and storage of tea and tea by-products.
- (f) Represent the Government in international and local fora in matters relating to the tea industry.
- (g) Regulate import and export of tea.
- (h) Control pests and diseases; and
- (i) Promote and protect interests of farmers against syndicates of buyers, which may be formed through associations.
- (j) Performing any commercial function as the Minister may consider necessary.

3.5.2 The Tea Regulations, 2010

Issues of particular interest to this study as provided by the Tea Regulations are as follows:

(a) Interpretation of Key Terms

Regulation 3 provide for the following important definitions that are of interest to the study:

“Grower” includes an individual grower, cooperative society, association or company cultivating tea and registered by the Board.

“small scale grower” means a grower holding less than 20 hectares of land planted with tea.

“medium scale grower” means a grower holding not more than 200 hectares but not less than 20 hectars of land planted with tea.

“large scale grower” means a grower holding over 200 hectares of land planted with tea.

“Estate” means an area of not less than 200 hectares of land planted with tea and has a primary processing factory attached to it.

“Green leaf buyer” means a person, association or company licensed by the Board to buy green leaves from a registered grower for processing into made tea using his own processing factory.

(b) Registration by the Board

Regulation 11 (1) provides that “Without prejudice to the provisions of Section 5 of the Act, and for the purposes of (a) monitoring contracts of farming (b) regulating green leaf tea quality (c) regulating tea processing and manufacturing (d) controlling import and export of tea (e) establishing a basis for planning; and (f) dealing with any other relevant matters in the tea industry, the Board shall register and maintain a register of all tea dealers.

Regulation 11 (2) provides that “a tea dealer registered pursuant to sub-regulation (1) shall be issued with a Registration Number”.

Regulation 11 (3) provides that “The Board shall not charge registration fee to any tea dealer”.

(c) Restriction on Growing or Selling Green Leaf Without Registration

Regulation 12 (1) provides that “A grower shall not sell green leaf tea to a tea processing factory unless he has been registered by the Board pursuant to Regulation 11”.

Regulation 12 (2) provides that “A person shall not deal with a grower in either buying green leaves from him or any activity related to tea industry unless such grower has been registered by the Board”.

Regulation 12 (3) provides that “Any person who contravenes the provisions of this regulation commits an offence and shall on conviction be liable to a fine of not more than five hundred thousand shillings or to imprisonment for a term of not more than twelve months”.

(d) Qualification for Registration of a Grower

Regulation 16 (1) provides that Before any person is registered as a grower, he shall be required to satisfy the Board that (a) he is already growing tea at the time of registration or, he has definite intention to (b) commence growing tea within a period of six months from the date of being registered (c) the area under tea or area on which tea is to be grown is not less than one acre (0.40 ha); and (d) the tea field is located within a radius not exceeding 40 km from the tea processing factory,

provided however, where the distance exceeds 40 km the tea buyer provides proof satisfactory to the Board that he is able to transport and deliver tea to the processing factory.

Refusal of registration and De-registration of a tea dealer is dealt with under Regulations **17** and **18** of the Tea Regulations, 2010 respectively.

(e) Mode of application for a license and permit

Regulation 21 provides that “An application for a license or permit shall be in a prescribed form as provided for in the *First Schedule*”.

(f) Type of Licenses and Permits

Regulation 23 (1) provides that “The Board shall issue to any qualified applicant, the following licenses or permits (a) Green Leaf Tea Buying License, (b) Green Leaf Tea Processing License, (c) Tea Blending and Packing License (d) Tea Export Permit, and (e) Tea Import Permit”.

Regulation 23 (2) provides that “Notwithstanding the provisions of sub regulation (1), the Board shall not issue a license under paragraph (c) to a manufacturer for the purpose of bulk packing for export sales or for sale to licensed local tea blenders and packers”.

(g) Buying Centers

Regulation 48 (1) provides that “The Board shall register an established buying center for the purpose of buying and selling of green leaf tea”.

Regulation 48 (2) provides that “For the purposes of preservation of green leaf tea at buying centers, the Board shall set sanitary standards to be adopted by growers, buyers or transporters of green leaf tea”.

Regulation 48 (3) provides that “The trading hours at tea buying centres shall be from 8.00 hours in the morning to 18.00 hours in the evening”.

Regulation 48 (4) provides that “Registered tea manufacturers shall produce monthly reports to the Board showing monthly purchases and deliveries of green leaf tea to the processing factory”.

Regulation 48 (5) provides that “Any person who sells green leaf tea outside an established and registered buying centre commits an offence”.

Regulation 48 (6) provides that “No person other than a grower shall sell green leaf tea at a buying centre”.

Regulation 48 (7) provides that “A person shall not sell green leaf tea obtained from the farm of another person”.

(h) Indicative and Actual Price

Regulation 49 (1) provides that “The Board shall, after consultation with other stakeholders, set indicative price for buying green leaf tea for each year which shall be used as a minimum price.

Regulation 49 (2) provides that “Notwithstanding the provisions of sub regulation (1), negotiations for the establishment of the actual price of green leaf tea in a respective tea growing area shall be done by tea growers through their associations or co-operative societies and buyers”.

Regulation 49 (3) provides that “The actual price arrived at under sub regulation (2) shall not be below the minimum price”.

(i) Domestic Sales of Tea

Regulation 50 provides that “A manufacturer shall sell made tea to blender and packer or any other person who has been licensed”.

(j) Export and Import Procedures

Regulation 51 (1) provides that “A manufacturer, blender or packer may, subject to the acquisition of an export permit from the Board issued upon such terms and conditions as the Board may prescribe, export made tea”.

Regulation 51 (2) provides that “A blender and packer shall import made tea, subject to the acquisition of an import permit from the Board issued upon such terms and conditions as the Board may prescribe”.

(k) Requirement for Processing within the Country

Regulation 53 (1) provides that “All green leaf tea produced in Tanzania shall be processed within the country”.

Regulation 53 (2) provides that “The Board shall set standards to guide small scale green leaf tea processing within the country”.

Regulation 53 (3) provides that “Without prejudice to the provisions of sub regulation (1) the Minister may, for a specified period, allow the sale or processing of green leaf tea outside the country”.

(l) Roles of the Stakeholders Meeting

Regulation 55 provides that “Roles of the stakeholders meeting shall be to (a) deliberate and make resolutions on issues presented to it (b) determine modalities for financing its meeting and activities (c) arrange for funding of the shared functions and other matters of common interest to tea stakeholders (d) form committees and working groups for the better carrying out the shared functions (e) deliberate and determine indicative green leaf tea price (f) implement any other matter for sustainability and stability of the tea industry”.

(m) Value Chain Analysis in Service Delivery

Regulation 65 provides that “in ensuring compliance to standards of service to stakeholders, the Board and the Agency in collaboration with other key stakeholders shall observe that (a) the roles and responsibilities of each actor in the tea industry contributes to adding value to the development of the tea industry (b) the potential for adding value through the means of cost advantage or differentiation is enhanced (c) the tea industry attains sustainable competitive advantage”.

(n) Information and Data Collection

Regulation 66 (1) provides that “Every respective tea dealer shall submit to the Board a monthly report on (a) the tea planted acreage (b) volume or tonnage of crop purchased and processed (c) export and local sales and average price (d) availability and distribution of inputs in accordance with the relevant terms of the farming contract (e) Any other information as the Board may deem necessary”.

Regulation 66 (2) provides that “The Board shall compile and furnish a copy of the monthly report to the respective key stakeholders”.

Regulation 66 (3) provides that “The Board shall maintain all statistical data and information relating to the tea industry in the country”.

(o) General Offence and Penalty

Regulation 67 provides that “Any person who contravenes any of these Regulations where no other punishment has been specified commits an offence and shall upon conviction be liable to a fine of not less than five hundred thousand shillings or to a term of imprisonment not exceeding twelve months or to both such fine and imprisonment.

(p) Corporate Liability

Regulation 68 provides that “Where any offence against these regulations has been committed by any person with the consent or approval of a director, manager, secretary or any other authorized officer with the capacity as a director of that body corporate, shall be deemed to have committed the offence in the corporate name”.

(q) Contract Farming between Smallholder Farmers and Green Tea Leaves Buyers

Schedule One of the Tea Regulation in its Form 2 Green Leaf Tea Buying License in the 13th Condition in the Green Leaf Tea Buying Licence provides that “Every buyer should enter into sales contract with any grower for minimum period of one year on such terms and conditions as the parties may agree upon and no buyer should enter into a sale contract with a grower who has another contract with another buyer”.

The statutory provisions cited in the discussion above and their effects shall be discussed in the context of market analysis in the results chapter of the current study.

CHAPTER FOUR

RESEARCH METHODOLOGY

4.1 Chapter Overview

This chapter covers the overall research design and further provides for details in data collection methods, description of data to be used in each and every objective and sampling methods employed in data collection. It also provide for data collection methods as well data analysis covering the models employed in the analyses as well as the statistical package to be employed.

4.2 Research Design

The research design of this study is constructed around the Competition Assessment Framework (CAF) which is basically a neoclassical approach. The CAF borrows from competition theory and methods common in studying complex phenomena such as market behaviour dynamics involving remotely located small holder farmers and giant multinational firms in interacting one market with the Government in a changed role play as an overseer. The study is descriptive in nature where both qualitative and quantitative approaches, using field data on green tea leaves trade so as to create deeper understanding of the actual behavior of economic actors in thin markets.

4.3 Data Collection

Green tea leaves data were collected from the Rungwe, Mufindi and Muheza green tea leaves Districts in Tanzania where there are high, mid-level and low volumes of trade respectively.

4.3.1 Types of Data

Cross sectional data in farmers segment (primary data), secondary data for Gross margins for buyers and processors. Time series data were also collected to establish trends in the relevant markets.

4.3.1.1 Secondary Data

Secondary data on tea leaf buying and selling markets in Tanzania and in particular Rungwe, Mufindi and Muheza tea growing districts and the Tea Board of Tanzania. Data were also sourced from the Tanzania Revenue Authority (TRA) Regional Offices in Iringa, Tanga and Mbeya. Other organizations both governmental and non-governmental that deal with tea, District Agricultural and Livestock Development Officers (DALDO) were approached in search of the required data.

4.3.1.2 Primary Data

Cross-sectional data were collected from a sample of 180 farmers selected from purposefully sampled farmer groups. There was collection of primary data from a sampled tea buying companies operating in the relevant markets. A structured questionnaire for each group was developed and administered. In addition, participatory appraisal was employed to collect relevant qualitative information. This involved discussing market issues with key informants including Government officials at district and regional offices, village officials, cooperative society leaders, cooperative union leaders, Tea Board officials in the relevant markets and Headquarters in Dar es Salaam. The researcher also held focus group discussion with farmers and their group/association leaders; checklists were prepared to guide these discussions.

4.3.2 Sampling Methods

Stratified sampling was employed in selecting farmers to be interviewed. The stratification was based the following factors, whether the farmers belong to an association, group, institution or an individual. This was the prime criteria for selection, another criteria was distance from green tea leaves buying centers and accessibility (30 km from the main road).

The researcher chose the interviewed farmers (those meeting the criteria due to budget and time constraints) randomly from a sampling frame. Lists of registered green tea leaves farmers obtained from district agricultural offices were used as sampling frames for respective green tea leaves growing districts i.e. Rungwe, Mufindi and Muheza.

The population for Rungwe and Mufindi were found to be too big compared to that of Muheza thus the researcher based on the fact that the farmers are faced with the same constraints and subject to benefit from similar steam of benefits; as per Kothari (2006), employed extra criteria of picking farmers who had been on particular association from 2004 when the FCA became operational as reductive criteria that would make the three samples compare.

The sample size for each green tea leaves growing districts was 60 thus making the total of sampled and interviewed green tea leaves farmers to be 180. This was a representative sample was pegged at 10.5 % of the population of the farmers which is within the range 5-20% of the population reported in Mayoux (2006).

Census was adopted in interviewing the 7 green tea leaves processors cum green tea leaves buyers found in the respective green tea leaves growing districts i.e. Rungwe (2), Mufindi (3) and Muheza (2).

4.3.3 Questionnaire Design and Administration

The questionnaire was designed to collect both quantitative and qualitative primary data. A structured questionnaire designed to collect primary data from farmers and buying companies. The questionnaires consisted of sections arranged to suit both requirements of the Competition Assessment Framework model and ensuring capture of all information required to suffice the study. The researcher and other trained enumerators administered questionnaires to both farmers and buying companies. The key informant interviews and focus group discussions were conducted by the researcher.

4.3.4 Key Informant Interviews

The researcher held in-depth discussions with seven (7) individuals who were selected because of their presumed knowledge about particular topics and issues within the tea sector (2), competition law (2), competition and markets economics (3). The inquiries were organized around a carefully considered set of questions that were designed to engage the informant in offering information and their opinions.

Key informant interviews were also used in landscape performance tracking to gather information from a wide range of informants in the identified relevant markets that include but not limited to professionals, residents and external stakeholders who

have firsthand knowledge about green tea leaves business, agro markets and competition.

4.4 Data Analysis

4.4.1 Descriptive Analyses

Descriptive analysis including percentages, sums, cross tabulations and means were employed to describe general characteristics of market participants. Data on the indicators of entry and exit to the business, capital and social capital needed to practice in a higher position within the chain were gathered based on actual position of the market participants and potential entrants. Diagrams and graphical plots were used to describe marketing channels identified from primary information collected. Other variables captured descriptively include social economic characteristics of market participants e.g. age and marital status.

4.4.2 Content Analysis

Content analysis refers to an almost boundless set of diverse research approaches and techniques, used in the social science domains and in the humanities to identify methods for studying and/or retrieving meaningful information from documents. It further refers to a family of techniques oriented to the study of "mute evidence" of texts and artifacts. The technique was successfully employed in (Mlulla, 2005) and also in (Ferrarra, 2010). The technique was employed in review of literature in identifying variables of interest in addressing the first and second objectives.

4.4.3 Triangulation

Triangulation involves using multiple data sources in an investigation to gain understanding. Some see triangulation as a method for corroborating findings and as

a test for validity. Triangulation assumes that a weakness in one method will be compensated for by another method, and that it is always possible to make sense between different accounts. A single method can never adequately shed light on a phenomenon. Using multiple methods can help facilitate deeper understanding.

Triangulation is therefore a method for validation or verification; qualitative researchers generally use this technique to ensure that an account is rich, robust, comprehensive and well-developed (O'Donoghue and Punch, 2003). This technique was successfully used in (Mlulla, 2003 and Mlulla, 2005). The technique was employed in addressing objective number three and testing the third hypothesis in this study whereby cross tabulations, t-test and ANOVA were used.

4.4.4 Benchmarking

A measurement of the quality of an organization's policies, products, programs, strategies and their comparison with standard measurements, or similar measurements of its peers. The objectives of benchmarking are (i) to determine what and where improvements are called for, (ii) to analyze how other organizations achieve their high performance levels, and (iii) to use this information to improve performance (businessdictionary.com, 2015).

For this study, EWURA's functioning and performance as reported in Mlulla, (2014), were chosen as a benchmark for economic regulation in lieu of competition in the tea sector and the identified relevant markets. The technique was employed in addressing objective number one and testing the first hypothesis in this study.

4.4.5 Competition Harm Index

Competition Harm Index (CHI) refers to a number (as a ratio) derived from a series of observations and used as an indicator or measure; specifically a number or expression (as an exponent) associated with another indicator use or position in an arrangement. Based on literature, the competitive harm arising from each and every theory thereof was assigned a weight as provided in the Table 5.

Table 5: Competition Harm Index

Anti competitive harm	Weight (w) Assigned
Vested interests	≤ 1
Vertical integration	≤ 2
Barriers to entry	≤ 3
Un notified mergers	≤ 4
Cartels	≤ 5
Abuse of market power	≤ 5

To compute the overall competition index for particular markets we add up weights as cumulative total. The maximum harm was rated at $(5+5+4+3+2+1) = 20$. In this case where the market would be faced with all five anticompetitive conduct at their maximum severity. The higher the overall score in the competition index the more the severity of anticompetitive harm in that particular market. means the market participant faced with several competition misconduct hence high market distortion.

For example, the market faced with vested interest, vertical integration and barriers to entry allotted with competition index score of 6 $(1+2+3)$. The weights were assigned based on the literature as cited in Ross, 2009 and the intensities were assigned based on the assessments of individual farmers in the study areas.

4.4.6 The Chi-Square Statistic

The Chi-Square statistic is most commonly used to evaluate Tests of Independence when using a cross tabulation. Cross tabulation presents the distributions of two categorical variables simultaneously, with the intersections of the categories of the variables appearing in the cells of the table.

The Test of Independence assesses whether an association exists between the two variables by carefully examining the pattern of responses in the cells; calculating the Chi-Square statistic and comparing it against a critical value from the Chi-Square distribution allows the researcher to assess whether the association seen between the variables in a particular sample is likely to represent an actual relationship between those variables in the population. This technique was successfully used in (Mlulla, 2003, 2005). The technique was employed in addressing all the four objectives and corroborate the testing of all the four hypotheses in this study.

4.4.7 Student's t-test

A is any statistical hypothesis test in which the test statistic follows a Student's t-distribution if the null hypothesis is supported. It can be used to determine if two sets of data are significantly different from each other, and is most commonly applied when the test statistic would follow a normal distribution if the value of a scaling term in the test statistic were known. This technique was successfully used in (Mlulla, 2003 and Mlulla, 2005). The technique was employed in addressing the third objective and corroborate the testing of the third hypothesis of the present study.

4.4.8 Gross Margin Analysis

Gross margins of farmers and buyers were determined and used as a proxy variable for profits in this study. This model has been found to be useful where some data might be hard to collect e.g. profits of firms have been hardly declared by firms, also depreciation calculations have been difficult to obtain due to life time of fixed assets, appreciation and salvage values estimation problems in many firms thus necessitating the use of gross margins rather than profit margin analysis in this study.

Gross margins for different farmer categories were estimated. Farmer categories are: (a) those organised in Farmers' Groups (b) those organised in Farmers' Associations (c) those Institutional Farmers (d) Individual Farmers. Gross margins of Green Tea Leaves buying companies were also determined. Gross Margin (GM) is obtained by subtracting Total Variable Cost (TVC) from Total Revenue (TR) as follows:

$$GM_i = TR_i - TVC_i$$

Where;

GM = Gross Margin of a farmer/buyer

TR= Total Revenue of farmer /buyer

TVC= Total Variable Cost of farmer/buyer

i = 1-n farmer/buyer

Total Revenue was obtained by multiplying kilogrammes sold during the 2013/2014 season by price of green tea leaves in (TZS) offered during the same season. Total Variable Costs were obtained by summing up all the variable costs the i^{th} farmer/buyer incurred during the 2013/2014 season. Cost items for farmers were

determined by the study present as seen in the attached farmers and buyers' questionnaires.

The fundamental advantage of gross margin analysis as an economic analytical tool includes the easiness to understand, logical interrelation of economic and technological parameters and its forecasting ability of rational variants for the operational structure of an enterprise or individual farmer. Disadvantages of the model include its inability to take into account variations of fixed costs structure within and/or among enterprises and its failure to make allowance for complementary and supplementary relationship between farmers (Pomeroy and Trinad, 1995). The model was employed in addressing objectives number three and four and also provided an essential statistic in testing the third and fourth hypotheses in the present study.

4.4.9 Analysis of Variance

F-test is used for comparisons of the components of the total deviation. For example, in one-way or single-factor ANOVA, statistical significance is tested for by comparing the F test statistic (Kilem Li, 2011).

Means for these different farmer categories were determined and compared using one-way analysis of variance (ANOVA) to test the hypothesis that gross margins are the same for all farmers under different marketing channels in the relevant market. Successful studies that employed the model include (Philip, 2001) in a study of economics of medium scale sugarcane producers in Morogoro. Silomba (2000) in assessing performance of beans marketing in Kigoma also employed the model

successfully. The model was employed in addressing objective number three and testing the third hypothesis in this study.

4.4.10 Small but Significant and Non-transitory Increase in Price Test

In competition law, before deciding whether companies have significant market power which would justify government intervention, the test of small but significant and non-transitory increase in price (SSNIP) is used to define the relevant market in a consistent way. It is an alternative to ad hoc determination of the relevant market by arguments about product similarity. The SSNIP test is crucial in competition law cases accusing abuse of dominance and in approving or blocking mergers. Competition regulating authorities and other actuators of anti-trust law intend to prevent market failure caused by cartel, oligopoly, monopoly, or other forms of market dominance (Scherer, 2009).

The SSNIP test seeks to identify the smallest relevant market within which a hypothetical monopolist or cartel could impose a profitable significant increase in price. The relevant market consists of a "catalogue" of goods and/or services which are considered substitutes by the customer. Such a catalogue is considered "worth monopolising" if should only one single supplier provided it, that supplier could profitably increase its price without its customers turning away and choosing other goods and services from other suppliers (Scherer, 2009).

The application of the SSNIP test involves interviewing consumers regarding buying decisions and determining whether a hypothetical monopolist or cartel could profit from a price increase of 5% for at least one year (assuming that "the terms of sale of

all other products are held constant"). If sufficient numbers of buyers are likely to switch to alternative products and the lost sales would make such price increase unprofitable, then the hypothetical market should not be considered a relevant market for the basis of litigation or regulation.

Therefore another, larger, basket of products is proposed for a hypothetical monopolist to control and the SSNIP test is performed on that relevant market (Scherer, 2009). The model was employed in addressing objective number one and two and testing the first and second hypotheses in the current study.

4.4.11 Herfindahl-Hirschman Index

The HHI is a measure of market concentration. HHI is an indicator of anticompetitive behaviour among firms in an industry. It is calculated by summing the squares of the individual firms' market shares, and thus gives proportionately greater weight to the larger market shares. The HHI ranges from 10,000 to a number approaching zero.

The HHI of 10,000 shows that the market is characterized by a single seller i.e. monopoly market. On the other hand the HHI close to zero indicate that the market is nearly perfect competitive. The HHI thresholds are provided to cater for competition issues that revolve around market power, mostly mergers and abuse of dominance (U. S. Department of Justice and the Federal Trade Commission, 2010). HHI is however often used to assess concentration markets in general as it is the case for this study. The thresholds are as presented in Table:

Table 6: Description of HHI Thresholds and Effects to Competition

Degree of Market Concentration	Post Merger HHI	Market Competition Effects
Un concentrated	HHI<1500	Markets are unlikely to have adverse competition effects.
Moderately Concentrated	1500<HHI<2500; and delta HHI<100	Markets are unlikely to have adverse competition consequences.
	1500<HHI<2500; and delta HHI>100	Markets are raising a potential for significant competition concerns.
Highly Concentrated	HHI>2500; and delta HHI <100	Markets are unlikely to have adverse competitive consequences.
	HHI>2500; and 100<delta HHI <200	Markets are raising a potential for significant competition concerns.
	HHI>2500; and delta HHI >200	Markets likely to create or enhance market power or facilitate its exercise.

Data Source: U. S. Department of Justice and the Federal Trade Commission, 2010

4.4.12 Cost-Benefit Analysis

Cost benefit Analysis (CBA) refers to an approach to making economic decisions whereby the analysis helps analyst to appraise, or assess the case for a project, programme or policy proposal. The process involves, whether explicitly or implicitly, weighing the total expected costs against the total expected benefits of one or more actions in order to choose the best or most profitable option (Ferrara, 2010). Cost–benefit analysis is often used by governments to evaluate the desirability of a given intervention. It is heavily used in today's government. It is an analysis of the cost effectiveness of different alternatives in order to see whether the benefits outweigh the costs. The aim is to gauge the efficiency of the intervention relative to the status quo (Ferrara, 2010). This methodology was employed in evaluating

scenarios that which require rule of reason i.e. the benefits to the public resulting from the merger/agreement outweigh the detriments caused by preventing, restraining or distorting competition in the relevant market. The model was employed in addressing objective number one and two and testing the first and second hypothesis in this study.

4.4.13 Regression Analysis

The theory behind regression models provide that linear regression, estimates the coefficients of the linear equation, involving one or more independent variables that best predict the value of the dependent variable. The regression model was employed to address the fourth objective.

According to Strutz, (2010), Generalized Least Squares (GLS) is a technique for estimating the unknown parameters in a linear regression model. GLS can be used to perform linear regression when there is a certain degree of correlation between the explanatory variables (independent variables) of the regression. In these cases, ordinary least squares and weighted least squares can be statistically inefficient, or even give misleading inferences (Strutz, 2010).

GLS technique was used in estimation because of the nature of its dependent variable (Gross Margins) being non probabilistic and having a normal distribution. Gross Margins were used as a proxy for pro competition functioning (performance) of the market. As farmers seek to raise their incomes from the green tea leaves business in their respective relevant markets on one hand and the Government seeks to ensure that the markets also work to the advantage of the same farmers; it follows therefore

that a common denominator for the two farmer and Government can be arrived at in Gross margins thus the reason for its choice as a proxy measure for pro competition functioning of the market. The estimated parameters were also having logical signs proving further that the model had no severe multicollinearity after the corrections. The other common problem (inherent) with cross sectional data is heteroskedasticity, which makes the t values small due to large variances, the researcher transformed the variables in the model into natural logarithm form so as to take care of the inherent heteroskedasticity.

Both spatial and non-spatial factors were included in the model. Spatial variables included distance of the farm to green tea leaves buying centre and time taken from the farm to the green tea leaves buying center. Non-spatial variables include, age of green tea leaves farmers, duration of training on skills for green tea leaves farming, distance from the farm to the green tea leaves buying centre, time taken to get to the green tea leaves buying centre from the farm, distance from the farm to the green tea leaves buying centre, years of experience in green tea leaves farming, dummy for farmers' ownership in the processing plant, number of mature green tea leaves trees in the tea farm and dummy for competition issues found in the relevant markets.

Specification of the model is as hereunder:

$$GM = f(A, S, D, T, C, E, O, N, C) \dots\dots\dots (1)$$

GM = Gross Margin (Performance)

A = Age of green tea leaves farmer

S = Duration of training on skills for green tea leaves farming

D = Distance from the farm to the green tea leaves buying centre

- M = Dummy for the marketing channel for which the green tea leaves are sold
- T = Time taken to get to the green tea leaves buying centre from the farm
- E = Years of experience in green tea leaves farming
- O = Dummy for farmers' ownership in the processing plant
- N = Number of mature green tea leaves trees in the tea farm
- C = Index for competition issues found in the relevant markets

In analyzing the factors affecting pro-competition functioning of the identified relevant markets, the following empirical model was estimated using Generalized Least Squares (GLS) estimator.

$$GM_i = \beta_0 + \beta_1 A_i + \beta_2 S_i + \beta_3 D_i + \beta_4 M_i + \beta_5 T_i + \beta_6 E_i + \beta_7 O_i + \beta_8 N_i + \beta_9 C_i + \varepsilon_i \dots (2)$$

Where

β 's - represent elasticity of parameters to be estimated.

i - represent individual farmer (i=1, 2,....., 180).

ε - is a random error term capturing all other factors that influences the Gross Margin but not included the model.

As the right hand side includes several variables both spatial and non-spatial factors, the model permits the multivariate analysis required to analyze the intricate relationships between these explanatory variables and farmers gross margins.

Detailed description for each and every variable used in the specified model above and their anticipated signs is as provided hereunder:

(i) Age of green tea leaves farmer

Age of exporter was thought to be of significant influence since it could bear an element of decision-making and aggressiveness of labour offered by the participant in the course of trading. For these reasons, the researcher decided to include it in the model. It is expected that the variable would bear a negative sign implying that as age advances the gross margins would decline.

(ii) Duration of training on skills for green tea leaves farming

Skills are practical ability to perform a certain job an individual acquires after a period of training. It is expected that the longer the training the more efficient an individual becomes and it would be reflected in the earnings one gets from whatever one does. The expected sign is positive.

(iii) Time taken to get to the green tea leaves buying centre from the farm

This would reflect the picking and loading expenses that incurred by farmers through the price the producer receives from the buyer. It is predicted that the longer it takes to get the green tea leaves buying centre the higher the cost and thus the lower green tea leaves farmers' gross margin. The variable tries to assess how remoteness of the farm affects the gross margin of the respective green tea leaves farmers. The variable is expected to bear a negative sign.

(i) Distance from the farm to the green tea leaves buying centre

This would reflect the picking and loading expenses that incurred by farmers through the price the producer receives from the buyer. It is predicted that the longer distance to the green tea leaves buying centre the higher the cost accruing to the green tea

leaves farmer and thus the lower green tea leaves farmers' gross margin. The variable tries to assess how remoteness of the farm affects the gross margin of the respective green tea leaves farmers. The variable is expected to bear a negative sign.

(ii) Dummy for the marketing channel for which the green tea leaves are sold

In the study areas there are nine different marketing channels identified for which green tea leaves are sold out to both domestic and international markets. The presumption is such that all the nine different market channels do result in different gross margins to farmers. Invariably, there are those marketing channels that results in bigger gross margins to green tea leaves farmers than the others. In this regard, the variable has value 1 "if the marketing channel results in bigger gross margins to green tea leaves farmers" and 0 "if otherwise". The two groups (marketing channel resulting in bigger gross margins to green tea leaves farmers and otherwise) were identified by the green tea leaves farmers themselves during the study. The variable is expected to bear positive sign.

(iii) Years of experience in green tea leaves farming

This variable aims at capturing the effect of experience of farming on gross margins of the producers. It is presumed that the more experienced the producer is the more efficient he is and thus realize big gross margin, for this case the variable is expected to bear a positive sign.

(vii) Dummy for farmers' ownership in the processing plant

A dummy variable for the farmers' ownership in the green tea leaves processing plant with 1 "for those farmers with ownership in the green tea leaves processing

plant” and 0 “for otherwise”. It is presumed that those farmers who own a stake in the upper value chain that is in the green tea leaves processing plants are having bigger gross margins than those who do not have any ownership in green tea leaves processing plants. The variable is expected to bear a positive sign.

(viii) Number of mature green tea leaves trees in the tea farm

The number of mature trees was used as proxy variable for farm size, it was thought that the productivity of the farm depended more on the number of trees present in the farm than the farm size. The higher the numbers of mature trees the higher the gross margins. The variable was expected to bear a positive sign.

(ix) Index for competition issues identified in the relevant markets

A continuous variable representing the score for competition issues found in the identified relevant markets in terms of anticompetitive agreements between buyers, misuse of market power or abuse of dominance and anti-competitive mergers. The study had also investigated on possible barriers to entry into the identified relevant markets and vested interests as non-enforcement anticompetitive issues. It is presumed that those relevant markets where green tea leaves farmers reported anticompetitive issues (either enforcement or non-enforcement); those green tea leaves farmers are having smaller gross margins than those who did not report anticompetitive issues (either enforcement or non-enforcement). The variable is expected to bear a negative sign.

(x) Gross Margin

This is a continuous variable independent variable that represents performance of every farmer that was a sampled in this study. For all those dependent variables

which increased the margin they bear a positive sign and those that bear a negative sign means that the variable decreased the gross margin. The model was employed in addressing objective number four and testing the fourth hypothesis in this study.

CHAPTER FIVE

RESULTS AND DISCUSSION

5.1 Chapter Overview

This chapter presents findings and insights to the findings of the study. The first section deals with the socio economic characteristics of the green tea leaves farmers and the description of the study areas. The second section deals with the legal framework providing for competition issues in the Tea sector and its markets. The third section reports on the identified relevant markets and anti-competitive conducts in the Tea sector particularly in the identified relevant markets as per the competition assessment framework. The fourth section addresses the issue of performance of the identified relevant markets in the competition assessment framework perspective. The last section identifies and discusses factors affecting pro competition functioning of the identified relevant markets in the Tanzanian Tea sector.

5.1.1 Description of the Tea Sector

Table 7: Distribution of Farmers and Cultivated Area by Tea Growing Districts

S/N	District	Number of Farmers	Cultivated Area (Hectares)
1.	Rungwe	15,233	3,237.20
2.	Njombe	5,441	3,703.50
3.	Ludewa	234	42.57
4.	Mufindi	1,552	1,500.00
5.	Kilolo	306	78.60
6.	Korogwe	1,882	612.48
7.	Lushoto	3,908	1,950.86
8.	Muheza	393	292.18
9.	Tarime	481	46.91
10.	Muleba	64	60.20
11.	Bukoba	255	114.16
Total		29,749	11,638.66

Data Source: Tea Board of Tanzania (2015)

The tea sector is subdivided into 11 different tea growing districts as shown in Table 7. There are 29,758 farmers who cultivate a total area of 11,638.66 hectares. The three selected districts of Rungwe, Mufindi and Muheza (the study areas) constitute 57.8 % of the farmers and 43.2 % of the total area under green leaf tea cultivation in Tanzania.

5.1.2 Description of Market Participants in the Study Areas

Table 8: Results of Distribution of Farmers by Age in the Identified Relevant Markets

Sample Distribution by Age group (%)				
Age Groups	Mufindi	Muheza	Rungwe	Total
20-29	1.8	0.6	1.2	3.6
30-39	3.6	4.2	3.0	10.8
40-49	5.4	9.0	16.2	30.5
50-59	11.4	9.6	4.2	25.1
60-69	6.0	5.4	4.2	15.6
70-79	3.6	3.0	5.4	12.0
80+	1.2	0.6	0.6	2.4
Total	32.9	32.3	34.7	100.0

In terms of ownership of the green tea leaves farms, results in Table 8 show that the age group of 40 - 49 years is the dominant with 30.5 % followed by that of 50-59 years. This finding explains the fact that ownership is a subject of longevity in life is required to acquire the necessary financial resources to own land and thus cultivate green tea leaves in the study areas. Furthermore, it is observed that the results were independent of districts the responses came from ($p > 0.05$, χ^2 value= 0.251) implying that the response is common to all green tea leaves farmers irrespective of their tea buying districts in the study.

Results show that Rungwe had the most experienced farmers in all the study areas followed by Muheza and Mufindi. This is explained by the fact that Rungwe was among the first areas that tea was established in Tanzania (since 1904), and thus the explanation on the high number of farmers as well. Much as Muheza is also an old timer in green tea leaves business, its performance has been halted by a number of reasons.

According to key informant findings, presence of alternative crops which pay more than tea like, cardamon, cinnamon, cloves, black pepper, sugar cane and banana have to a great extent contributed to the decline of tea in the relevant market. These crops pay more compared to green leaves tea for example when you compare 1 kilogramme of cloves sells between TZS 18,000 and 25,000 as compared to 1kg of green tea leaves which sells at TZS 176. Cardamon sells between TZS 12,000 and 18,000 per kg as a result green tea leaves farmers prefer them for green tea leaves. In some cases it has even resulted into crop switch i.e. uprooting tea trees and replacing the same with the said alternative crops.

Table 9: Results on Distribution of Farmers by Education Level

Distribution of Producers by Education Level (%)					
Districts	None	Primary Education	Secondary Education	Tertiary Level	Total
Mufindi	3.4	24.7	3.4	0.0	31.6
Muheza	0.0	31.0	2.9	0.0	33.9
Rungwe	2.9	24.1	2.3	5.2	34.5
Total	6.3	79.9	8.6	5.2	100.0

Results on Table 9 show that the most (79.9%) of the green tea farmers were educated to Primary school level implying that they could read, count and write to be able to run a green tea leaves farming enterprise. Furthermore, it is observed that the results were independent of districts the responses came from ($p>0.05$, χ^2 value = 22.3) implying that the response is common to all green tea leaves farmers irrespective of their tea buying districts in the study.

5.1.3 Socio-economic Characteristics of the Farmers

Mufindi had the largest mean acreage followed by Rungwe and Muheza at 4.76, 1.58 and 3.15 acres respectively as shown on Table 10.

Table 10: Results on Distribution of Farmers by Key Social Economic Characteristics

	Districts			Mean
	Mufindi	Muheza	Rungwe	
Farm acreage	4.76	1.58	3.15	3.16
Acreage with matured tea	4.80	1.57	3.00	3.09
Acreage with immature tea	0.93	0.63	0.13	0.27
Number of mature trees in the farm	18453.00	8976.00	12210.00	11728.00
Number of immature trees	3950.00	1375.00	466.53	814.21
Vacant percentage in the farm	11.22	6.40	4.39	6.54

This is explained by the fact that green tea leaves farming in Muheza is predominantly done in estates and as per key informant interview findings there are more paying alternative cash crops in the area that make tea a non priority to farmers.

Table 11: Results for Responses on Farmer's Conduct in Changing Buyers by Districts

District	How often do you change the buyer you trade with and/or into contract with (%)			Total
	very often	very rare	never	
Mufindi	0	28	5	33
Muheza	0	34	0	34
Rungwe	3	15	16	33
Total	3	76	21	100

Furthermore, it is observed in Table 11 that the results were dependent of districts the responses came from ($p < 0.01$, χ^2 value = 56.0) implying that the response is common to all green tea leaves farmers irrespective of their tea buying districts in the study. This is explained by the fact that in Rungwe the largest buyer (WATCO) has a unique feature of having farmers owning shares in the processing plant thus their preference to the company as compared to the rest of the farmers in all the three identified relevant markets. Invariably, the same Rungwe farmers are the ones that responded never in bigger quantum (16%) as compared to the rest of farmers.

Table 12: Distance and Time taken from the Farm to Buying Centers

Districts	Average Time Taken (in minutes)	Average Distances (in meters)
Mufindi	46.4	658.1
Muheza	19.8	1327.9
Rungwe	18.3	221.8
Total	24.58108	747.025

Results in Table 12 show that Muheza had both the longest distance to time ratio to reach to the buying centre as compare to the other two relevant markets. Since green tea leaves are a low value bulky commodity, the transportation cost is a factor that might hamper the performance of the green tea leaves farmers in this relevant market.

5.2 The Legal and Regulatory Framework in the Identified Relevant Markets of the Tea Sector

The first hypothesis to be tested was based on the premise that the legal framework in the tea sector and its resulting value chain is inadequate to provide for competitive

market dynamics in the identified relevant markets. The discussion will focus on value chain in the identified relevant markets, key market players in the value chain, the discovery of indicative and actual green tea leaves prices, the missing link between the FCA and the TIA on Provision of Adequate Oversight in the relevant markets.

5.2.1 Legal Framework and its Resulting Value Chain in the Identified Relevant Markets

The provisions shaping the value chain in the identified in the literature review and in particular Regulation 12 (1) provides that

“A grower shall not sell green leaf tea to a tea processing factory unless he has been registered by the Board pursuant to Regulation 11”.

Regulation 12 (2) provides that

“A person shall not deal with a grower in either buying green leaves from him or any activity related to tea industry unless such grower has been registered by the Board”.

Regulation 16 (1) (d) provides that

“Before any person is registered as a grower, he shall be required to satisfy the Board that the tea field is located within a radius not exceeding 40 km from the tea processing factory, provided however, where the distance exceeds 40 km the tea buyer provides proof satisfactory to the Board that he is able to transport and deliver tea to the processing factory”.

Schedule One of the Tea Regulation in its Form 2 Green Leaf Tea Buying License in the 13th Terms and Conditions For Green Leaf Tea Buying Licence provides that

“Every buyer should enter into sales contract with any grower for minimum period of one year on such terms and conditions as the parties may agree upon and no buyer should enter into a sale contract with a grower who has another contract with another buyer”.

Regulation 3 provide for the following important definitions that are of interest to the study:

“Grower” includes an individual grower, cooperative society, association or company cultivating tea and registered by the Board.

“Green leaf buyer” means a person, association or company licensed by the Board to buy green leaves from a registered grower for processing into made tea using his own processing factory.

“tea buyer” means a tea blender or packer licensed to buy made tea from local tea processors for blending and packing.

“tea dealer” for the purpose of registration includes a grower, processor, blender and packer, exporter and importer of tea.

The above provisions have culminated into a value chain as described in Figure 7. This study is based on the upstream part of the value chain which involves the growers in particular the green tea leaf smallholder farmers, and the green tea leaf buyer cum green tea leaf processor cum made tea manufacturer. The study went further into sale of made tea in one aspect of buyer’s gross margins only as it is deemed to indirectly affect the gross margins of the small holder farmers.

The foregoing provisions have restricted both the farmers and the buyers from growing, selling or buying of green tea leaves if not registered a tea dealer and outside the radius of 40 kilometers from a tea processing factory. It is also important to note that a green leaf buyer other than themselves being registered thus being restricted, but more grievous is the fact that the Board requires them to buy green leaves from a registered grower for processing into made tea using his own

processing factory. This means, there is a statutory enjoinder of green leaf growing and processing as according to the study findings, over 90 % of the green tea leaves buyers are also large green tea leaves growers. Invariably, the contract farming arrangement as provided in the 13th term of the green tea leaves buyer's license restrict not only the small holder farmers' choice to sell their produce but also ties them down with one buyer for at least a year; although key informant interview findings have shown that farmers in the relevant markets seldom change buyers they have engaged with at the start of their green tea leaves business unless assigned by the earlier buyer to the current buyer.

The presence of these two provisions in the tea sector legal framework have foreclosed the all the three relevant markets and thus violate the basic assumption of free entry and exist into a market that characterises perfect competitive market model as discussed in Koutsoyiannis (1985). Equivocally, the assumption on the existence of many buyers and many sellers as reported in Koutsoyiannis (1985) has also been violated as witnessed by the fact that the relevant markets had an average of two to three buyers who engage with an average of 5,726 registered farmers (Tea Board of Tanzania, 2011). This is notwithstanding the mutually reinforcing detraction that the 13th term in the green tea leaves buyers license throw into the competitive landscape as explained above.

The anticompetitive harm that usually result from violation of the said assumption is usually reflected in two key competition aspects of price and other non-price terms of trade/business; of particular interest to this study is the price of green tea leaves offered to green tea leaves farmers yearly and create a perpetual problem in the tea

sector. Invariably, it has taken social and political dimensions at greater heights to warrant it being referred to as unresolved phenomena. This was discussed in details from legal, economic and best practice aspects as hereunder provided.

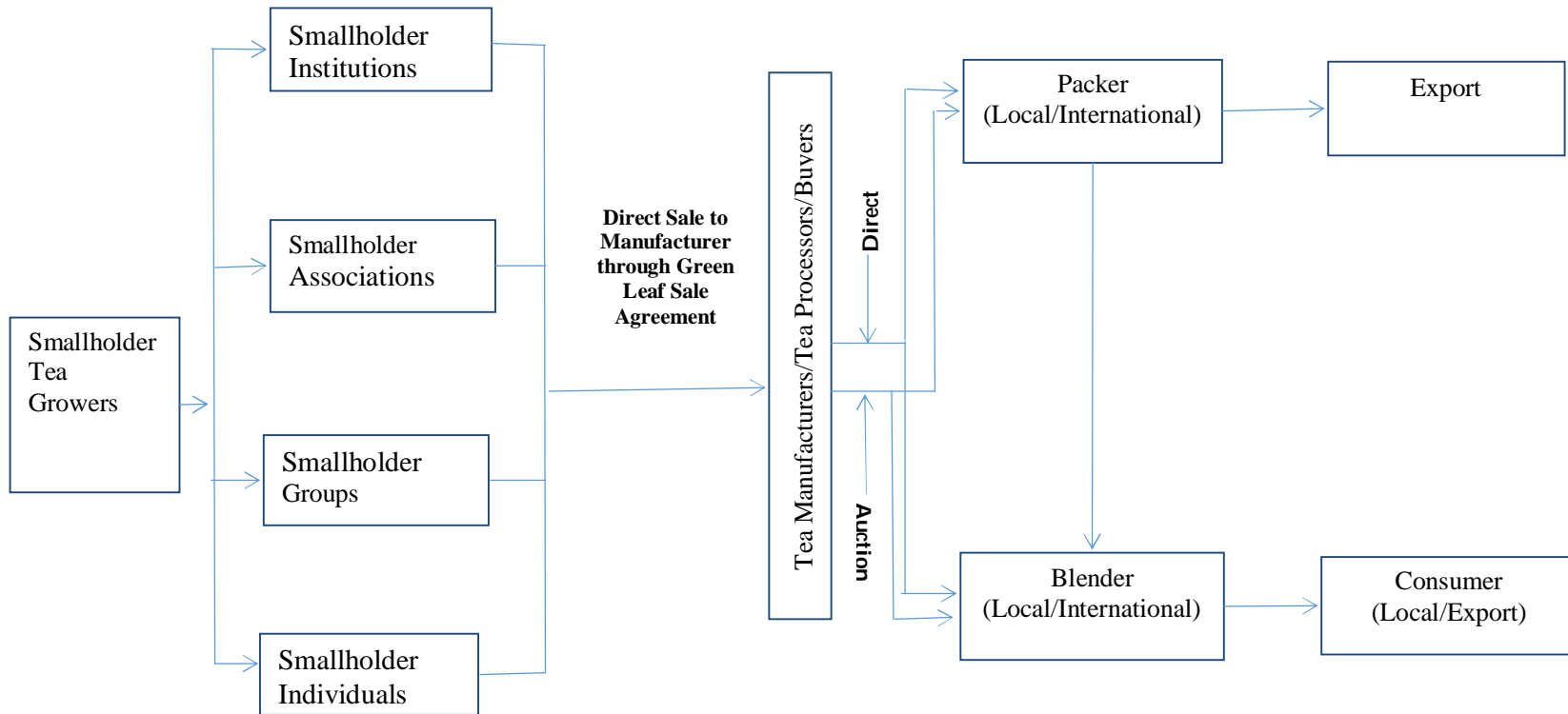


Figure 7: Green Tea Leaf Value Chain in Tanzania

5.2.1.1 Key Market Players in the Value Chain

Based on the available information at the Tanzania Tea Board, the registered tea manufacturing companies are Unilever Tea Tanzania Limited (UTTTL) which own 3 factories in Mufindi namely Lugoda, Kilima and Kibwela. Kisigo Tea Company Limited who own 1 factory in Mufindi and Kiganga Tea Factory. Mufindi Tea and Coffee Limited (MTC) who own 4 factories namely Itona Tea factory in Mufindi and Ikanga Tea Factory, Kilena Tea Factory and Luponde Tea Factory all in Njombe.

Wakulima Tea Company Limited (WATCO) who own 2 factories in Rungwe namely Katumba and Mwakaleli. Kagera Tea Company Limited who own 1 Factory called BKD Maruku Tea Factory. Mohamed Enterprises Limited (MeTL) who own 3 factories namely Arc Mountain Tea Factory and Dindira Tea Factory in Korogwe and Chivanjee Tea Factory in Rungwe. Bombay Burmah Trading Company (BBTC) who own two Factories namely, Marvera Tea Factory in Muheza and Herkulu Tea Factory in Lushoto. East Usambara Tea Company Limited (EUTCO) which owns two factories namely Kwamkoro and Bulwa in Muheza. Mponde Tea Company Limited which owns 1 Factory called Mponde Tea Factory in Lushoto which is currently not operational since May 2014. Lastly, Dhow Merchantile Limited which own 1 factory in Lupembe Njombe, the factory has not been operational since 2008.

With regards to blenders, there Chai Bora Limited in Mafinga (Mufindi); BK Tea Blenders in Bukoba (Yetu Chai). International Food Packers Limited in Tanga (Chai Amani). Chai Leo Limited, Tanzan Tea Blenders Limited (Chai Asili); Promasidor Company Limited (Chai Jaba), Kyimbila Tea Blenders Limited (Chai Tausi), Afri

Tea and Coffee (1967) Blenders Limited (formerly known as Tanzania tea Blenders Limited), Al- quam Tea Blenders (My Gold Tea) Limited in Dar es Salaam.

With regards to the made tea that the above mentioned buyers process, it was learnt that it is either (ungraded tea) which is known as DMT (Dry Mouth Tea) or graded tea with the following grades.

(Primary) 1 st grades	}	1. BP	-	Broken Pekoe
		2. PF	-	Pekoe Funnings
		3. PD	-	Pekoe Dust
		4. D	-	Dust
(Secondary) 2 nd grades	}	5. BMF	-	Broken Mixed Funnings
		6. FNGS	-	Funnings

5.2.2 The Discovery of Indicative and Actual Green Tea Leaves Prices

Regulation 49 (1) provides that “The Board shall, after consultation with other stakeholders, set indicative price for buying green leaf tea for each year which shall be used as a minimum price. Key informant interviews have revealed that in practice the different sects of stakeholders do hold their own caucus to deliberate and agree on a common position with regards to the indicative price. Green tea leaves buyers through their Trade Association called Tea Association of Tanzania have been doing this annually under the auspices of the Tea Act and Regulation prior to Stakeholders Meetings. The issue of concern here is the fact that these green tea leaves buyers are competitors who meet to discuss and agree on a price to be offered to sellers (green

tea leaf farmers). According to Key informant findings, this is construed to mean that the Tea Industry Act and Regulation 55 (e) of the Tea Regulations, 2010 have statutorily empowered the green tea leaves buyers to agree to fix a price contrary to section 9 (1) (a) of the FCA which provides that “A person shall not make or give effect to an agreement if the object, effect or likely effect of the agreement is price fixing between competitors”.

Furthermore, key informant interviews findings based on the benchmark as provided by Arora and Sarkar (2008) have shown that the relevant markets in this study are haunted by a very high likelihood of occurrence of anticompetitive agreements commonly known as cartels which is a grievous offense from a competition perspective, as shall be demonstrated hereunder. Table 13 summarises the findings.

Table 13: Results on the Impact of Market Factors on Cartel Sustainability in the Relevant Markets

SN	Factor	Impact on Cartel Sustainability	Presence in the Tanzania Tea Sector	Commentary
1	Small number of firms	Positive	Yes	very few buying firms (2 to 3 in a relevant market)
2	High concentration	Positive	Yes	The HHI for Rungwe is 6415.12 The HHI for Mufindi is 5472.72 The HHI for Muheza is 8924.9 Markets likely to create or enhance market power or facilitate its exercise.
3	Similar cost functions of firms	Positive	Yes.	Costs are determined in the Stakeholders Meeting pursuant to Regulation 55 (e) of the Tea Regulations, 2010 in which the price build up encompasses cost thus affording firms having similar cost functions.
4	High entry and exit barriers	Positive	Yes.	Requirement provided in Regulation 3 that “Green leaf buyer” shall buy green leaves from a registered grower for processing into made tea using his own processing factory erects a significant regulatory barrier.

5	Trade association	Positive	Yes.	The green tea leaves buyers who are also green tea leaves processors and made sellers are organised in an association known as Tea Association of Tanzania.
6	Mutual trust	Positive	Yes.	The green tea leaves buyers who are also green tea leaves processors and made sellers are organised in an association known as Tea Association of Tanzania.
7	Homogeneous goods	Positive	Yes.	The green tea leaves are the same irrespective of where they are grown and are not graded.
8	Market transparency	Positive	Yes.	The green tea leaves buyers who are also green tea leaves processors and made sellers are organised in an association known as Tea Association of Tanzania. Moreover Regulation 66 (1) provides sharing of sensitive information such as price and volumes of trade.
9	Threat of legal sanctions	Negative	No.	Neither the Act nor the Regulations have created competition offences. Rule 67 has provided for general offences light penalties of fines of not less than TZS 500,000 or or to a term of imprisonment not exceeding twelve months or to both such fine and imprisonment.
10	Large powerful buyer	Negative	No.	
11	Demand fluctuations	Negative	No.	Influenced by the buyers.

Furthermore, with regards to Regulation 49 (2) which provide that “Notwithstanding the provisions of sub regulation (1), negotiations for the establishment of the actual price of green leaf tea in a respective tea growing area shall be done by tea growers through their associations or co-operative societies and buyers”. Regulation 49 (3) provides that “The actual price arrived at under sub regulation (2) shall not be below the minimum price”; Key informant finding have shown that seldom do the green tea leaves buyers differentiate the Actual price from the Indicative price in the relevant markets. This is equivalent to saying that in practice the indicative price is often the actual price that green tea leaves farmers end up getting season after season thus

rendering Regulation 49 (2) less effective if not redundant in the absence of its proper management.

Further examinations of the growers' category show that there are small holder farmers (who are the focus of the study) and estates (growers with over 200 hectares). The study findings have shown that all (100%) green tea leaves buyers also grow green tea leaves for their factories as well as per Regulation 3 of the Tea Regulations, 2010. Literal interpretation of the Regulation 49 (1) in this context is that smallholder green tea leaves growers, green tea leaves buyers who are also processors and manufacturers of made tea do meet, discuss and agree on indicative price that is eventually set by the Board pursuant to Regulation 55 (e) of the Tea Regulations, 2010.

Key informant interview findings have given insights that the green tea leaves indicative price formula has three key variables and their explanations as given hereunder:

(a) Made Tea Price

What price did tea processing factories obtained by selling made tea in the market i.e. both local and export.

(b) Out-turn Ratios

How much of the green leaf from farmers was used to produce made tea sold by the tea processing factories. Production coefficients i.e. input-output proportions which is currently given as 4.5 kilograms of green tea leaves produces 1 kilogram of made tea.

(c) Farmers' Share

How much of the market price should the farmer get by selling green leaf to the tea processing factory? Farmers should get at least X% of the made tea price achieved by the factory that they supply green leaf.

The fact that green tea leaves buyers are also growers of green tea leaves raises a reasonable suspicion that they are market player with an advantage of knowing both the growing, buying and selling, processing of green tea leaves let alone the selling of made tea they produce which eventually impact on the indicative price of green tea leaves. Furthermore, key informant findings have revealed that green tea leaves farmers through their associations do not have an equivocal access to the information that buyers possess regarding their upper value chain part of the green tea leaves business. This raises an issue of violation of a basic assumption of a perfectly competitive market model on information symmetry.

The same findings are from a competition perspective, construed to amount to an abuse of dominance issue of vertical integration backwards of the green tea leave buyers/processors in the value chain that arises and ought to be addressed either directly by the Tea Industry Act or indirectly through reference of such issues to the relevant law and the authority established therefrom that is the Fair Competition Act.

Despite all this evidence of existence of threats of two core anticompetitive matters, the framework composed of the Fair Competition Act No. 8 of 2003 and its Fair Competition Commission Rules of Procedure, 2013 together with the Tea Industry Act of 2009 (as amended) and its Tea Regulations, 2010 do not provide for clarity on

handling of competition issues in the sector hence it inadequacy. The following sub topic moves to explain on this missing link.

5.2.3 The Missing Link between the FCA and the TIA on Provision of Adequate Oversight

It is true that both competition law and policy on one side and economic regulation aim at defending the public interest against monopoly power. It has been observed Section 96 (2) of the FCA provide that “A person shall not contravene the FCA by reason only of engaging in a conduct, unless a provision of an enactment specified in sub-section (3): (a) requires the person to engage in the conduct or conduct of that kind; or (b) authorizes or approves the person engaging or refraining from engaging in conduct of that kind.

Section 96 (3) provide that “The enactments referred to in sub-section (2) are: EWURA Act, 2001 SUMATRA Act, 2001 the Tanzania Communications Regulatory Authority Act, 2003 the Tanzania Civil Aviation Authority Act, 2003 and sector legislation referred to in the sector legislation, enactments for the protection of the environment; and, any subsidiary legislation or instrument under any of the aforementioned Acts”.

For ease of understanding the relevant provisions of subsections 2 and 3 are read together as follows “A person shall not contravene the FCA by reason only of engaging in a conduct, unless a provision of EWURA Act, 2001 SUMATRA Act, 2001 the Tanzania Communications Regulatory Authority Act, 2003 the Tanzania Civil Aviation Authority Act, 2003 and sector legislation referred to in the sector

legislation (a) requires the person to engage in the conduct or conduct of that kind; or (b) authorizes or approves the person engaging or refraining from engaging in conduct of that kind”.

From the theory of competition and market regulation as reported by Taimoon (1999) it is an established fact that activities that entail economic regulation include (a) adopting cost based measures to control monopoly pricing (b) granting and policing licenses to eligible providers and (c) setting output prices and other terms of sale. These activities are done by EWURA, SUMATRA, TCRA and TCAA based on the fact that Economic regulation applies to sectors where structural conditions are such that competition is either non-existent or inherently limited to the extent that consumer welfare would in fact be damaged in the absence of regulatory intervention (Taimoon, 1999).

It is indeed true that in the relevant markets in this study, competition is either non-existent or inherently limited to the extent that consumer welfare would in fact be damaged; so in the course of ensuring markets are free of anticompetitive disruptions, the Legislature through amendment to the Tea Act in 2009 introduced section 5 (i) to provide for the promotion and protection of interests of farmers against syndicates of buyers, which may be formed through associations. Invariably the Legislature enacted section 5 and 26 of the Tea Act read together with Regulation 49 (1) of the Tea regulations to provide for alternative way of price discovery other than competition (forces of supply and demand).

It follows therefore that, these provisions were meant to cater for statutory legal requirements to provide for a pro competition environment in the relevant markets.

Before commenting and concluding on the same, it is important to make reference to selected legislation that have been enacted to ensure existence of contestable markets in their sector.

Section 24 of the Petroleum Act (2009) expressly referred competition issues such as cartels (anti-competitive agreements), abuse of dominant position, attempts to control prices, barriers to entry and all other Restrictive Trade Practices have been referred to the FCA and are to be handled by the FCC in the event of their occurrence.

Invariably, section 38 (2) and (3) of the EWURA Act (2003) provides for a mechanism where the Commissioner for Fair Competition is of the opinion that any conduct required, authorised or approved by the Authority (EWURA) (a) would be in breach of the Fair Competition Act; and (b) the conduct is against the public interest, the Commissioner shall report the matter to the Minister responsible for EWURA. Where the Minister receives a report from the Commissioner for Fair Competition he may direct the Authority to take the necessary steps to ensure that the conduct described by the Commissioner is not required, authorised or approved by the Authority (EWURA).

Furthermore, both the EWURA Act in sections 29 and 38 and the Petroleum Act in section 52 provide for appeals of EWURA's decisions to be made at the Fair Competition Tribunal (FCT) which is the FCC's decision appellant body as well. Key informant findings have shown that there is a case involving Oil Marketing Companies with their trade association Tanzania Oil Marketing Companies

(TAOMAC) that have been referred to the FCC through the said provision of the Petroleum Act. This demonstrates a legal and regulatory framework and mechanism that ensures is adequately providing for a sector where structural conditions are such that competition is either non-existent or inherently limited to the extent that consumer welfare would in fact be damaged in the absence of regulatory intervention as provided by Taimoon (1999) with resulting value chain which is adequate to provide for competitive market dynamics in its identified relevant markets.

The price discovery mechanism under the EWURA Act is as provided in section 17 (2) of the EWURA Act to the effect that “In making any determination, setting rates and charges or establishing the method for regulating such rates and charges, the Authority shall take into account– (a) the costs of making, producing and supplying the goods or services; (b) the return on assets in the regulated sector; (c) any relevant benchmarks including international benchmarks for prices, costs and return on assets in comparable industries; (d) the financial implications of the determination; (e) the desirability of establishing maximum rates and charges, and in carrying out regular reviews of rates and charges; (f) any other factors specified in the relevant sector legislation; (g) the consumer and investor interest; and (h) the desire to promote competitive rates and attract market; (i) any other factors the Authority considers relevant. (3) The Authority shall publish in the Government Gazette all the rates, tariffs and charges regulated by the Board”.

In comparison to the price discovery mechanism as provided in the Tea Regulations whereby Regulation 49 (1) provides that “The Board shall, after consultation with other stakeholders, set indicative price for buying green leaf tea for each year which

shall be used as a minimum price. Regulation 49 (2) provides that “Notwithstanding the provisions of sub regulation (1), negotiations for the establishment of the actual price of green leaf tea in a respective tea growing area shall be done by tea growers through their associations or co-operative societies and buyers”. Regulation 49 (3) provides that “The actual price arrived at under sub regulation (2) shall not be below the minimum price”.

The general observation is that the pricing formula for green tea leaves as earlier discussed is not as detailed as would be in other economically regulated sector such as that of petroleum products regulated by EWURA. Fundamental differences arise from the fact that EWURA has been vested with the statutory powers to DETERMINE and SET rates and chargers (tariffs). The rate or charge (price) so set having considered all the factors mentioned by the EWURA board that is appointed base on their knowledge of industry and strict conflict of interest provisions to ensure impartiality; is the ACTUAL price to be paid at the market place. WHEREAS as in Tea Regulation, the Board sets indicative price and let the farmers whom in section 5 (4) (i) of the Tea industry Act, have an obligation to promote and protect interest of farmers against syndicates of buyers; pursuant to Regulation 49 (2) negotiate with the same buyers. This is a shortcoming, that if left un attended shall continue to haunt the welfare of the farmers in the relevant markets and beyond in the Tanzanian tea sector.

Key informant interview findings have also shown that EWURA has a fully-fledged directorate for Economic Regulation which executes the issues to be considered in setting the rate or charge (price). The manpower, skills and competencies required

are adequately provided for by the Board. In the contrary, Key informant findings have revealed that the prices so set by the Board are arrived at by way of voting after the buyers have practically imposed the same at the consultative meeting. The Tea Board is mainly an observer as the defacto price setting player is the buyers, the Tea Board does not bear the mantle of DETERMINING the indicative price as would have been if the EWURA approach would have been employed. It is important to note that Indicative Price is determined at the Stakeholders' Meeting and the Board only endorses. The Tea Board has only one vote at the Stakeholder's Meeting as per Schedule three of the Tea Regulations, 2010.

Appeals against the decisions of the Tea Board are made to the Minister Responsible for the Tea Board. The Minister as a person may not be adequate to ensure the acumen required for the competitive price to emerge in the event of a dispute thus making the whole process wanting. In comparison to the EWURA provisions, where the acumen is ensured even at the appellant level where whereby again the appellant body, the FCT is a collegiate body of professionals advised by competent staff with required skills.

With regards to the handling of the statutorily provided potential anti-competitive conducts (abuse of dominant position and anti-competitive agreements) in the earlier findings discussions; it is a considered opinion of most (90%) of the key informants that there is need for a legislative review that will ensure that there is equal treatment for similar cases. This is based on the fact that there is a common situation in both the Tea and Petroleum sectors as reported by Taimoon, (1999) that economic regulation applies to sectors where structural conditions are such that competition is

either non-existent or inherently limited to the extent that consumer welfare would in fact be damaged in the absence of regulatory intervention.

What remains wanting is the fact that despite the existence of commonality in the prevalence of structural condition requiring economic regulation the diversity of style and manner with which the two markets (petroleum and tea) have been legislated upon as elaborated in the foregoing discussions. Based on the foregoing discussions and findings that Hypothesis One is thus answered to the affirmative that “the legal framework in the tea sector and its resulting value chain is inadequate to provide for competitive market dynamics in the identified relevant markets”.

5.3 Relevant Markets and Anti-Competitive Conducts in the Identified

Relevant Markets

The sub topic follows the provisions of the CAF by identifying the relevant markets by way of defining both the product and geographical markets which jointly provide for the relevant market. In the course of identifying the relevant markets, a SSNIP test was run and thus its results are being discussed and presented. The discussion proceeds to identify the anti-competitive conducts in the identified relevant markets in terms of abuse of dominance, anticompetitive mergers, anticompetitive mergers and other related anticompetitive conducts.

5.3.1 Identified Relevant Markets

In the identification of relevant markets the study considered both the product and geographical markets as asserted in (World Bank and DFID, 2008). The analysis is as follows hereunder.

5.3.1.1 The Product Market

In the identification of product markets, the study considered the definition provided by section 2 of the Tea Act on green leaf tea, which means leaf detached from tea plants but not dried or processed in any way. The study therefore for the purpose of ease of reference in this study considers the product market as buying and selling of green tea leaves.

5.3.1.2 The Geographical Market

In the identification of geographical markets, the study considered the provision of Regulation 16 (1) (d) of the Tea Regulations which provides that “Before any person is registered as a grower, he shall be required to satisfy the Board that the tea field is located within a radius not exceeding 40 km from the tea processing factory, provided however, where the distance exceeds 40 km the tea buyer provides proof satisfactory to the Board that he is able to transport and deliver tea to the processing factory”. Key informant interview have also shown that the Board has designated 11 tea growing districts in Tanzania. Among them are the Rungwe, Mufindi and Muheza. Invariably, for the purpose of ease of reference in this study, considers the geographical markets Rungwe, Mufindi and Muheza tea growing districts.

5.3.1.3 SNNIP Test Results

Table 14: Results for Responses on Allowance to Sell Outside Districts by Districts

District	Are you allowed to sell to any other Green Tea Leaves Processor outside your Tea Growing District (%)		Total
	No	I do not know	
Mufindi	32.2	1.1	33.3
Muheza	31.6	1.7	33.3
Rungwe	30.5	2.8	33.4
Total	94.3	5.7	100

The results on Table 14 show that 94.3% of the respondents reported that they were knowledgeable of the fact they were not allowed to sell their green tea leaves outside their prescribed green tea leaves buying district. Only a few (5.7%) said they did not know about such restriction whereas none reported that they are allowed to sell their green tea leaves outside their prescribed green tea leaves buying district.

Furthermore, it is observed that the results were independent of districts the responses came from ($p > 0.05$, χ^2 value = 0.090) implying that the response is common to all green tea leaves farmers irrespective of their tea buying districts in the study. With regards to the price at which farmers would defy the odd and sell their green tea leaves outside the prescribed tea buying districts in the study, Table 15 provides for the responses to the effect that most farmers (43%) considered TZS 400 to be such a price. Invariably, the average price that would make farmers sell outside their prescribed district is found to be TZS 420 in the tea buying districts in the study.

Table 15: Response on the Price that Farmer would sell outside Tea Growing Districts

Price (TZS)	Frequency	Percentage	Average Price (TZS)
300	1	4.3	
350	3	13.0	
400	10	43.5	420
450	4	17.4	
500	5	21.7	

Furthermore, it is observed that the results were independent of tea buying districts the responses came from ($p > 0.05$, χ^2 value = 0.0270) implying that the response is

common to all green tea leaves farmers irrespective of their tea buying districts in the study.

Table 16: Response on the Actual Price Paid to the Farmer in 2013/2014

Price (TZS)	Frequency	Percentage	Average Price (TZS)
225	57	31.7	237.2
231	31	17.2	
240	29	16.2	
250	63	35.0	

The actual price paid for a kilogram of green tea leaves in the 2013/2014 is TZS 237.2. The comparison with the price that would make farmer sell outside their green tea leaves outside the designated Tea Growing Districts which is TZS 420. The percentage price differential between the two is $(420 - 237)/100 = 183\%$. According to Scherer (2009), in running of SSNIP test, the price difference is required to be small to a maximum of 5%.

Based on the findings from the analysis of the two limbs of the relevant market, in this case, the 183% price increase shall be deemed to have failed the SSNIP test and for that matter the prevailing demarcations as provided by the Tea Act and its regulations would be upheld. To this effect the identified relevant markets are as hereunder.

5.3.2 Identified Relevant Markets

The identified relevant markets are a combination of the product and geographical markets. To this effect, based on the above discussions of duo, the relevant markets are identified as follows:

- (i) Buying and selling of green tea leaves in Rungwe tea growing district.

- (ii) Buying and selling of green tea leaves in Mufindi tea growing district.
- (iii) Buying and selling of green tea leaves in Muheza tea growing district.

5.4 Anti-competitive Conducts in the Identified Relevant Markets

In identifying the relevant markets, the provisions of the Competition Assessment Framework as reported in World Bank and DFID, 2008 were employed and detailed findings are as hereunder discussed.

5.4.1 Identified Existing Competitors

Table 17: Production Based Market Shares in the Identified Relevant Markets

Market	Company Name	July	August	September	Total	Market Shares (%)
RUNGWE	METL	60876	51100	117900	229876	23.4
	WATCO	188227	211257	352257	751741	76.6
	TOTAL	249103	262357	470157	981617	100.0
MUFINDI	Mufindi Tea Co.	90182	80844	128651	299677	27.4
	Unilever	201770	174965	374067	750802	68.6
	Kisigo Tea Co.	17393	11484	15548	44425	4.0
	TOTAL	309345	267293	518266	1094904	100.0
MUHEZA	EUTCO	124773	68037	146991	339801	94.3
	Bombay Burmah	7975	5249	7429	20653	5.7
	TOTAL	132748	73286	154420	360454	100.0

In Rungwe Mohamed Enterprises Limited (METL) is in competition with Wakulima Tea Company Limited (WATCO). According to the available documents and key informant findings, WATCO was incorporated in August, 2000 as a joint venture between Tanzania Tea Packers (TATEPA) AND Rungwe Small Holders Tea Growers Association (RSTGA) also known as UMOJA.

Key informants also provided that at inception TATEPA owned 75% and RSTGA owned 25% of the company share capital. After few years RSTGA increase shares to reach 33% and they intend to have shares more than 50%. WATCO through

RSTGA are in trade since 2002 whereas premiums to go village development projects (e.g. schools, water projects, fertilizer subsidy, health center and social services). Apart from that benefit, each farmer owns not less than five shares in RSTGA from which, these farmers also get additional payment through RSTGA from either the world market or local blenders in the event the respective player provide high price of made tea. This additional payment is also called second payment of green tea leaves price in case there was earning high price of made tea.

On average farmers can get up to TZS 300 per kilogram in a good season. Key informant findings further provide that farmers selling their green tea leaves to MeTL have no shares in MeTL. Contrary to their counterparts in WATCO who receive second payments in the event their company fetch good made tea price; these farmers do not get this and other benefit. This is in contradiction to the assertion by FIAS (2002) that made an impression that all farmers have stake in all stages of the tea value chain in Tanzania.

In Mufindi there are three competitors Mufindi Tea Company, Unilever and Kisigo Tea Company Limited. In Muheza, there are two companies, East Usambara Tea Company (EUTCO) and Bombay Burmah. The two companies have been in the relevant market since 2011. EUTCO is seemingly bigger than Bombay Burmah. According to Key informant findings, there have been cordial relations between the two companies as such there have been reported incidents particularly in periods of factory maintenance whereby Bombay Burmah has been selling green tea leaves to EUTCO.



Figure 8: Smallholder Tea Grower's Farm in Muheza

Furthermore it has been reported by key informants that in 2013/2014 green leaves tea selling/buying seasons Marvera factory owned by Bombay Burmah was shut down for maintenance and that time the other factory (EUTCO) could not have accommodated the extra green leaves tea from Marvera. This led to a situation where Marvera had to sell the tea green leaves to its Mother company Bombay Burmah which is outside the Muheza green tea leaves buying district. According to further key informant findings, this exercise was conducted under strict conditions that assured the Tea Board there would be no distortion of green tea leaves quality as a result of care and handling requirements during the longer distance covered during the transportation of the green tea leaves outside prescribed district.

This reported incident was carried out pursuant regulation 16 (1) (d) of Tea Regulations, 2010 as earlier discussed. Otherwise green tea leaves tea are sold at the registered or approved buying centre so any person who sells green tea leaves outside an established and registered buying centre commits an offence pursuant to Regulation 48 (5) (6) and (7) of the Tea Regulations, 2010.

5.4.1 Examination of the Relevant Markets' Concentration and Structure

Table 18: Market Concentration in the Relevant Markets

District	Calculation	HHI
Rungwe	$23.4^2 + 76.6^2$	6415.12
Mufindi	$27.4^2 + 68.6^2 + 4.0^2$	5472.72
Muheza	$94.3^2 + 5.7^2$	8924.98

According to the U. S. Department of Justice and the Federal Trade Commission (2010), all the identified relevant markets are highly concentrated at HHI values of 6415.12, 5472.72, 8924.98 for Rungwe, Mufindi and Muheza respectively based on the calculations in Table 19. High concentrations are a recipe for occurrence of anticompetitive conducts that this study seeks to identify in its second objective. Key informant interviews have also shown that the high concentrations and the dichotomy of market shares of the major green tea leaves buyers have been stable over a five years period which is considerably long enough to pose a threat of either entry barrier or predation or both as asserted by World Bank and DFID (2008).

Key informant interview findings have shown that there has not been much market entry in the past 10 years in all the three relevant markets. Findings in Table 25 (please cross refer) show that, evidently, there have been only two entries of MeTL in 2007 and Kisigo Tea Company in 2008 in the past 7 years i.e. 2006 – 2013. This market condition of having little or no entry over an extended period (seven years), might suggest barriers to entry are high; which is consistent with the assertion by World Bank and DFID, (2008).

Results in Table 17 (please cross refer) show the fact that a single buyer in Rungwe (WATCO), Mufindi (Unilever) and Muheza (EUTCO) account for 76.6 %, 68.6 % and 94.3 % respectively which are by every standards substantial parts of the respective relevant markets in this study. These findings are a reasons for concern based on the assertion by (World Bank and DFID, 2008), that the existence of high concentration may indicate high market power and a competition problem where a single buyer, or a small number of large buyers, account for a substantial part of the market as is the case in all the three indentified relevant markets of this study.

5.4.2 Barriers to Entry

Table 19: Results for Response on Buyers Owning Processing Plant by Districts

District	How do you assess the legal requirement that "Buyers" must have a processing plant (%)			Total
	It is a good requirement	It is a bad requirement	I do not know	
Mufindi	0	21.6	11.6	33.2
Muheza	0	26.6	6.6	33.2
Rungwe	0	26.1	7.2	33.3
Total	0	74.3	25.4	100

Response in Table 19 on a phenomenon that was considered to be the most grievous barrier to entry was subjected to test and the results are showing that most (74.3%) of the farmers are considering it a bad requirement whereas a few (25.4%) reported to be unaware of the effect of the requirement in the relevant three markets as identified. Furthermore, it is observed that the results were independent of districts the responses came from ($p > 0.05$, χ^2 value = 0.0475) implying that the response is common to all green tea leaves farmers irrespective of their tea buying districts in the study.

The results conform with the assertion in World Bank and DFID (2008) that provide for a market to remain competitive, it must be possible for new firms to enter and if there are barriers that either prevent entry or would delay it considerably, or that would make it costly to enter the market, the existing suppliers might be able to lower prices above the competitive level (actual price) as was the case of MeTL in Rungwe.

The results further resonate well with World Bank and DFID (2008) on the account that even if market shares are high, this might not result in prices below competitive levels if new suppliers (buyers) are likely to enter and in the absence of regulatory and policy barriers. The restrictions on entry, entrenched in Regulations 12, 16 and 48 of Tea Regulations have considered too stringent thus failing the test that the rationale for restrictions that limit competition requires objective justification as asserted in World Bank and DFID, (2008).

5.4.3 Unequal Enforcement of Laws and Regulations in the Identified

Relevant Markets

Key informant interviews held in Rungwe have revealed the existence of an arrangement between farmers group called Balimi Saccos that sells green tea leaves to MeTL. According to the informant and the corroboration done by the researcher, this group was originally registered as “Rungwe Tea Cooperative” (RUTEKO); it was deregistered by the Mbeya Regional Cooperative Office for want of compliance with the requirements particularly that of collecting green tea leaves and selling the same to the buyers.

Following the said deregistration, the members reorganized themselves into the incumbent BALIMI SACCOSS. According to the key informant, it was the leaders of the group who went to MeTL to convince him (which would be an offer) to buy their green tea leaves; upon acceptance by MeTL, the parties entered into a five years contract. Further revelations of the key informant showed that the contract entered was not that of direct sell of green leaves as per the Tea Regulations but was termed as contract of land lease interparty, meaning that the company contracted the land of farmers which will be utilized by him and farmers will be paid as laborers hired for plucking green tea leaves. According to the key informants, this was done so to escape from the law administered by the Tea Board of Tanzania.

This execution of the said contract is contrary to the provisions of Regulation 45 of the Tea Regulations, 2010 which declares unenforceable a contract farming agreement which is not registered by the Board pursuant to regulations 44 of the Tea Regulations, 2010. The arrangement is also in breach of the requirement that a company buying green tea leaves must have obtained the District Council within which it falls, and for this case the Rungwe District Council.

The competitive harm is according to the key informant derived from the fact that the original intention was for the group to collect their green tea leaves and offer the same for sale to WATCO. Incidentally, WATCO had already entered into a contract with RSTGA. Based on the later, WATCO turned down the offer. Based on this analogy, WATCO is suffering loss of green tea leaves to buy from its farmers as there is a side “unregistered buyer”.

Neither the Tanzania Tea Board nor the Rungwe District Council have instituted any action despite the fact that the arrangement is known to the functionaries of the respective authorities to the detriment of WATCO, the competitive landscape and the relevant market. These findings are a reason for concern based on the assertion by World Bank and DFID (2008) that no any firm in the relevant market should suffer from the unequal application of laws or regulations. In this case the silence of the authorities is deemed as unequal application of the law especially considering the fact that the owner of the alleged firm has been a Member of Parliament and a big business.

5.4.4 Vested Interests

Generally, there have been Members of Parliament sitting in Tea Board for a long time. It is even more serious when the Speaker of the National Assembly becomes not only a member of the Board but also the Chairperson. Honorable Speaker of the National Assembly is also the Board Chairperson of the Tanzania Tea Board. The oversight role of the Parliament is demeaned by such appointments because the Board decides and such decisions are subject to oversight of the Parliament that is also presided over by the Chairperson of the Tanzania Tea Board. It is an anomaly that carries with it a great potential for reduced competition in the Tea sector and in particular the relevant markets.

Key informant interview findings have shown that there has been a relocation of a department of the Smallholder Tea Growers Agency to the Njombe green tea leaves buying district. The department was meant to serve the entire tea sector in Tanzania, including the identified relevant markets in this study. The contrary is observed and

whether it is by design, default or mere coincidence, the Chairperson of the Tea Board hails from Njombe where the affirmative action is dwelt. This is for the purposes of this study, regarded as a situation where a stakeholder is opposed to equivocal increased competition in the identified relevant markets; the situation is consistent with the assertion by World Bank and DFID, (2008) that if the identity and objectives of such stakeholders are widely known, their power and influence should be reflected in the competition assessment.

5.4.5 Anti-Competitive Conduct

Horizontal issues are those that are found between competitors, that is, firms in the same line of business and thus are required as per the competition principles, to operate independent of each other by avoiding any kind of concerted efforts among themselves in exercise of the independence. The foregoing refers to issues of mergers and anticompetitive agreements. Invariably, firms are expected not to act unilaterally and distort the markets by way of abuse of their dominance. Identification of anticompetitive conducts is the second objective in this study. The findings are as discussed hereunder.

5.4.5.1 Abuse of Dominance

According key informant interviews findings, farmers selling to MeTL in Rungwe experienced a price reduction in June 2015 occasioned by the buyer. According to the key informant findings, at the start of the 2015 buying season the MeTL started buying green tea leaves at the price of TZS 240 per kilogram. This price was agreed upon interparty as the actual buying price for the green tea leaves pursuant to Rule 49 (2) of the Tea Regulations which in part provide that negotiations for the

establishment of the actual price of green leaf tea in a respective tea growing area shall be done by tea growers through their associations or co-operative societies and buyers.

In June, 2015, MeTL unilaterally, decided to dishonor the agreed actual price with farmers citing the reason behind the decision to be bad prices of made tea at the world market the company received last season. The price offered was reduced to TZS 176 per kilogram which was the indicative price announced by the Tea Board. This price was in consonance with the provision of Rule 49 (3) of the Tea Regulations that the actual price shall not be below the minimum price. Key informant findings further reveal that MeTL argued that the company was recuperating the losses incurred from the made tea business for the whole of 2014 season. This was after the same company had bought green tea leaves at TZS 240 in April and May 2015.

In a quick rejoinder, farmers refused to accept the new price of TZS 176 per kilogram. After a protracted tag of war interparty, wisdom prevailed and a conversation took place between leaders of the farmers and MeTL. In August, 2015 a consensus was reached that originally agreed actual price of TZS 240 per kilogram should prevail until the end of the season in October 2015 as earlier agreed.

Key informant findings further revealed that as consequences of the reduction of green tea leaves price many farmers have moved to selling to WATCO, a company that did not reduce the price. This is an act which is prohibited by Schedule 2 of the Tea Regulation on Obligations of the Out growers (farmers) which in part requires

the farmer not to enter into any other agreement that contradicts or frustrates the contract between the parties. Further findings show that some affected farmers remained with their green tea leaves unplucked for longer (2 more months) than would have been in the absence of the MeTL's unilateral action to drastically drop the buying price.

From the competition perspective, based on the provision of section 5 (6) of the FCA which in part provides that "A person has a dominant position in a market if both (a) and (b) apply: (a) acting alone, the person can profitably and materially restrain or reduce competition in that market for a significant period of time; and (b) the person's share of the relevant market exceeds 35 per cent.

With regards to Section 5 (6) (a); on acting alone (MeTL) unilaterally because the competitor WATCO did not reduce the actual price), the person (MeTL) can profitably (it has reported profits and continues with business) and materially (an established company of high repute and owned by an influential member of the Public, a member of Parliament) restrain or reduce competition (the price reduction made farmers suffer loss of income as they refused to pluck their tea for selling) in that market for a significant period of time (two months).

With regards to Section 5 (6) (b); the person's (MeTL) share of the relevant market exceeds 35 per cent. Key informant findings have shown that MeTL buys from contract farmers, from an association called Balimi and also produces own tea from its estates. In consideration of these three elements, MeTL attains a market share of 36.4 which is above the rule of thumb requiring at least 35% market share.

The foregoing is consistent with the assertion by World Bank and DFID (2008) that for a firm to abuse dominance in a market, it needs to have a high market share. A dominant firm is one that has sufficient market power to allow it to make price and output decisions without having to take account of the likely reaction of competitors. A dominant firm may among other issues increase prices above competitive levels by charging excessive price. As the relevant market is oligopsonistic in nature in line with the assertion in Barry and Argus, (2008) by having a few (2) buyers and many sellers, the reverse of increase price above competitive level becomes lowering prices below the competitive level (assuming the actual price discovered was the competitive price).

Irrespective of the solution that came about after negotiations, the case portrays the fact that the relevant market are plagued by possible anti-competitive conducts with an abuse of dominance limb of theory of harm.

Table 20: Distribution of Farmers' Response on Kickback

Response	Districts			Total
	Mufindi	Muheza	Rungwe	
Yes	0.00	0.56	2.79	3.35
No	32.96	32.96	30.73	96.65
Total	33.0	33.5	33.5	100
Average Amount (Kg) - Kickback	-	200	35	117.5

This is a malpractice that whereby green tea leaves farmers are forced to either give up on their green tea leaves for free or at a throw away price as a result of buyers' decision not to buy from the farmer. The average amounts green tea leaves lost by farmers in this practice estimated to be 117.5 kilograms of green tea leaves. Much as

it is a small amount, but the practice has a potential to grow and raze havoc to already plagued state of affairs of the green tea leaves farmers in the study areas.

5.4.5.2 Collusion and Cartels

In Rungwe there are two companies, WATCO and MeTL, their pricing behavior is as hereunder.

Table 21: Comparison between Indicative and Actual Prices in Rungwe 2011 - 2015

Year	Indicative Price (TZS)	Actual Price (TZS)
2011	196	WATCO 200 MeTL 210
2012	200	WATCO 200 MeTL 210
2013	206	WATCO 231 MeTL 240
2014	225	WATCO 231 MeTL 240
2015	176	WATCO 231 MeTL 240

In Muheza, there are two companies (EUTCO) and Bombay Burmah, pricing behavior is as hereunder.

Table 22: Comparison between Indicative and Actual Prices in Muheza 2011 - 2015

Year	Indicative Price (TZS)	Actual Price (TZS)
2011	196	EUTCO 196 Bombay Burmah 196
2012	200	EUTCO 200 Bombay Burmah 200
2013	206	EUTCO 206 Bombay Burmah 206
2014	225	EUTCO 225 Bombay Burmah 225
2015	176	EUTCO 176 Bombay Burmah 176

In Mufindi there are three companies MTC, KTC and Unilever; their pricing behavior is as hereunder.

Table 23: Comparison between Indicative and Actual Prices in Mufindi 2011 - 2015

Year	Indicative Price (TZS)	Actual Price (TZS)
2011	196	MTC 200 KTC 200 Unilever 200
2012	200	MTC 200 KTC 200 Unilever 200
2013	206	MTC 206 KTC 206 Unilever 206
2014	225	MTC 250 KTC 250 Unilever 250
2015	176	MTC 250 KTC 250 Unilever 250

According to World Bank and DFID, (2008), competitors sometimes collude to limit the intensity of competition by making agreements to fix prices, to divide the market geographically between them, to conduct boycotts or to rig bids for contracts. Given the nature of this study, the only plausible limb of competitive harm is price fixing. This is so because the Tea Industry Act and the Tea Regulations, 2010 have already divided the markets by virtue of Regulations 16 (c) of Tea Regulations requiring sell of green tea leaves to be within a geographical distance of 40 kilometers from a tea processing factory. Invariably, the issue of conducting boycotts has not been reported anywhere in the course of conducting the interviews whereas bid rigging cannot arise as the business model in the relevant markets is not built on bids or tenders to warrant bid rigging or collusive tendering.

The general assessment of the pricing behavior in Rungwe show that the buying companies have in the past five years (2011 – 2015), inconsistently differentiated the indicative price by TZS 4 and 14 respectively to WATCO and MeTL in 2011; TZS 0 and 10 respectively to WATCO and MeTL in 2012; TZS 25 and 34 respectively to WATCO and MeTL in 2013; TZS 6 and 15 respectively to WATCO and MeTL in 2014; and TZS 55 and 64 respectively to WATCO and MeTL in 2015.

In Muheza; the observation is that, the pricing behavior of the buying companies has shown that consistently in the past five years (2011 – 2015) the two companies have not differentiated the indicative price. This is to say, there has been a synonymous pattern of not graduating the indicative price into actual price all through the five years of assessment.

In Mufindi; the observation is such that all the three companies differentiate the indicative price by TZS 4 in 2011; TZS 0 in 2012; TZS 4 in 2011; TZS 0 in 2013; TZS 25 in 2011; TZS 0 in 2014 and TZS 4 in 2011; TZS 74 in 2015. This is to say, there has been a synonymous pattern of either graduating or not graduating the indicative price into actual price all through the five years of assessment.

The synonymous pattern observed in Muheza and Mufindi considered together with the high concentrations in the two relevant markets witnessed by the HHI values of 8924.9 and 5472.72 for Muheza and Mufindi respectively; the results are consistent with report by Khemani and Shapiro (1993) that cartels refer to cases of multiple producers acting in agreement that allow them to exercise monopoly power. It is evident that firms in the Muheza and Mufindi relevant markets have market power based on the HHI values.

The synonymous observations drawn from the Muheza and Mufindi cases resonate with the assertion that collusion is found in a situation where the prices in a seemingly competitive market, closely resemble that of a monopolistic market (Massimo, 2006). Given the foreclosure nature of the market resulting from regulation in the tea markets and contract farming the findings are also consistent with the report by Levenstein and Suslow (2006) that generally, cartels persist among firms with similar cost functions, thus facing similar production and marketing constraints hence incentives for the participating firms create and remain in the cartel. It is true that farmers do source tea seedlings, all farm inputs from one source thus having similar costs and thus cost functions thus warranting the resemblance as asserted in the foregoing. Empirical findings based on student's t-test are showing that there exist no significant difference in total variable costs between the buyers in the relevant markets of Mufindi and Muheza.

Table 24: Results (t-test) for Farmers' Gross Margins in Mufindi and Muheza Relevant Markets

Group	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf. Interval]
Mufundi	60	2223943	1034361	8012123	154192.7 4293694
Muheza	60	223728.3	30806.3	238624.5	162085.1 285371.6
combined	120	1223836	523324.2	5732729	187601.7 2260070
Diff		2000215	1034819		-49008.7 4049439
Diff = Mean (1) - Mean (2)					t =1.5329
Ho: diff = 0				Degrees of Freedom	118

Given the level high level of market transparency on volume or tonnage of crop purchased and processed, export and local sales and average price, availability and distribution of inputs in accordance with the relevant terms of the farming contract allowed by the Regulation 66 (1) of the Tea Regulations, 2010; the findings are also

in support of the findings as reported in Levenstein and Suslow (2006), that increase in cartel practices is partly due increasing transparency in most market, which makes it easier for cartel members to have access to sales and market share data of their competitors who eventually become cartel members.

In addressing the cartel issue, Levenstein and Suslow (2006) further reported that largely, cartels refer to shady behaviour of competitors in which they co-ordinate explicitly or tacitly to regulate markets so as to restrict competition. These agreements are frequently verbal and, although they can be harmful to competition, are difficult to detect. The patterns observed in Muheza and Mufindi relevant markets demonstrate the fact that the synonymous pricing behaviour can be as a result of tacit agreements between the green tea leaves buyers reached either verbally or in any other un explicit manner which makes it difficult to detect.

Notwithstanding the foregoing difficulty, Friederiszick and Maier-Rigaud (2007) reported that, collusion/cartels can be either explicit (organised) or tacit (implied) and that economic principles alone cannot provide a distinction between the two, unless abetted by the legal dimension of competition law. The competition authority should invoke the foregoing in attempting to find out the genesis and culpability of alleged firms based on these findings.

5.4.5.3 Mergers

Results in Table 26 show that there has been relatively low entry and exist of buyers in the relevant market. Evidently, there have been only two entries of MeTL in 2007 and Kisigo Tea Company in 2008 in the past 7 years i.e. 2006 – 2013. Key informant

interview revealed that Kisigo Tea Company came as a Greenfield new entrant into the market thus posing no potential for competition harm in the Mufindi relevant market.

Key informant interview findings revealed that MeTL bought the G.D Estates from Tukuyu Tea Estates Limited (TTEL) on the 28th March 2007. Key informants also revealed that the value of assets of TTEL was above TZS 800,000,000. In same 2007 MeTL was reported to have been at least United States Dollars 7.5 million in 2007 from its loan deal with Rand Merchant Bank (RMB), this is according to (Citizen Newspaper, 2014). Based on the definition of a merger as provided in Section 2 of the FCA that a merger means “an acquisition of shares, a business or other assets, whether inside or outside Tanzania, resulting in the change of control of a business, part of a business or an asset of a business in Tanzania”.

The transaction is therefore established to be as merger as follows; that there was an acquisition of a business (TTEL by MeTL) inside Tanzania, that resulted in change of control of a business (from TTEL to MeTL) in Tanzania. Given the fact that the transaction amounts to a merger and that it has met the requirement of the notification threshold of TZS on combined market value of assets as described above in this analysis; the merger was notifiable pursuant to Section 11 (2) of the FCA read together with Rule 33 (1) of the FCC Rules of Procedure, 2013.

It should be noted that at the time of the acquisition, both the FCA and the Merger Notification had come into operations from 12th May 2004 and 10th March 2006

respectively. Records of the transactions that have been notified at the FCC between 2006 and 2015 as reported in Mlulla, (2015) do not include the name transaction i.e. MeTL as the Acquiring firm and TTEL as the Target firm. Invariably, this non-notification is deemed to be an offence contrary to Section 11 (2) read together with Section 11 (6) of the FCA as described earlier.

This finding concurs with the assertion by World Bank and DFID, (2008) that where there is a substantial increase in concentration through mergers or acquisitions, dominance or collusion may be more likely. And that if there are high barriers to entry, or absence of countervailing buyer power, the anticompetitive influences arising from increased concentration might become more severe.

As it can be construed from a report by Friederiszick and Maier-Rigaud (2007) that economic principles alone cannot provide a solution to competition issues unless abetted by the legal dimension of competition law, this issue would require invocation of the right competition law provisions and particular attention should be on the section 60 (8) of the FCA which provides that the Commission may act upon an offence at any time within six years after the commission of the offence. Given the fact that the transaction was consummated in 2007 and the finding is coming up in 2015, the six year time limit is hit and defaulted by two years thus requiring justification in the event the FCC finds it plausible to pursue a case against the referred buying company in the Rungwe relevant market.

Table 25: Trend of Buying Companies in the Three Identified Relevant Markets in 2006 – 2015

MUFINDI							
YEAR	2006 - 2007	2007 - 2008	2008 - 2009	2009 - 2010	2010 - 2011	2011 - 2012	2012 - 2013
COMPANY	MTC	MTC	MTC	MTC	MTC	MTC	MTC
	UTTL	UTTL	UTTL	UTTL	UTTL	UTTL	UTTL
	UTTL	UTTL	UTTL	UTTL	UTTL	UTTL	UTTL
	UTTL	UTTL	UTTL *KTC	UTTL KTC	UTTL KTC	UTTL KTC	UTTL KTC
MUHEZA							
YEAR	2006 - 2007	2007 - 2008	2008 - 2009	2009 - 2010	2010 - 2011	2011 - 2012	2012 - 2013
COMPANY	EUTCO	EUTCO	EUTCO	EUTCO	EUTCO	EUTCO	EUTCO
	EUTCO	EUTCO	EUTCO	EUTCO	EUTCO	EUTCO	EUTCO
	BBTC	BBTC	BBTC	BBTC	BBTC	BBTC	BBTC
RUNGWE							
YEAR	2006 - 2007	2007 - 2008	2008 - 2009	2009 - 2010	2010 - 2011	2011 - 2012	2012 - 2013
COMPANY	TTEL	*MeTL	MeTL	MeTL	MeTL	MeTL	MeTL
	WATCO	WATCO	WATCO	WATCO	WATCO	WATCO	WATCO

- **Entry**

MTC	Mufindi Tea Company
KTC	Kisigo Tea Company
BBTC	Bombay Burmah Tea Company
TTEL	Tukuyu Tea Estates Limited
UTTL	Unilever Tea Tanzania Limited

5.4.6 Regulated Sector

As per the provisions of (World Bank and DFID, 2008) with regards to the issue of sectors condemned to economic regulation and whether they have been selected objectively based on economic principles following a credible selection process; the already discussed inadequacy of the legal and regulatory provision of competition in the relevant markets have highlighted a flawed process and a mismatch of structural market conditions and the employed tools. This is evident based on the fact that much as the tea sector relevant markets are fore closed in terms of regulated entry and exist and that prices are not discovered by orthodox way of market forces (conditions qualifying for economic regulation); the said agro markets are presumed to be under competition to which its basic requirements of price discovery and free entry and exit have been statutorily violated by TIA.

The above analysed position is construed to be a recipe for inbuilt and perpetual market failure that require to be fixed and thus make good of the identified relevant markets, other tea agro markets and other similar agro markets. To this end a solution to this identified problem is provided by way of a plausible competition enforcement model as presented hereunder.

5.4.6.1 The Plausible Competition Enforcement Model

Having described the missing link between the FCA and TIA, the present study endeavors to propose a solution to the identified problem in the competition enforcement machinery by way of a market competition enforcement model as shown in Figure 9 based on the two pieces of legislation read together with their subordinate legislation.

The model requires the amendments FCA and TIA and so that they recognize each other to the effect that the FCA exempts TIA from competition to automatically be condemned into economic regulation like EWURA Act, TCRA Act, SUMATRA Act and the TCAA Act have been treated under Section 96 (3) of the FCA. Invariably, the TIA should be amended to recognize the FCA as the main Act that provides for competition issues in the tea sector as was the case of section 24 of the Petroleum Act. The two amendments shall culminate in a coherent framework that leaves no loopholes as advocated in World Bank, (2015).

The last limb of the model, suggests a twofold approach in which the first all competition matters shall be statutorily provided for by FCC and the other limb proposes a concurrent jurisdiction between the FCC and the TTB with an option of reference of competition matters to the afforded to TTB. Based on the negative report on the concurrent jurisdiction reported in Kigwala (2015) with reference to the telecommunication sector, the study prefers the alternative that FCC has sole jurisdiction on competition matter in the tea sector. The preferred alternative presents an upper hand of success over the other for two main reasons, that, there shall be statutory certainty on which body does competition work in the tea sector as the mandate shall be provided to the FCC on the face of record.

Secondly, key informant interview findings have shown that FCC has already built the requisite expertise in analyzing competition both at institutional level and in terms of staff. The two factors provide comfort that there already exist an institution that is capable of handling competition matters thus reducing the burden of building the same capacity in a different institution i.e. TTB which might not make full use of

such capacity as it is bound to only one sector as compared to the FCC which is a multisectoral institution. Diagrammatic presentation of the model is as presented in Figure 9.

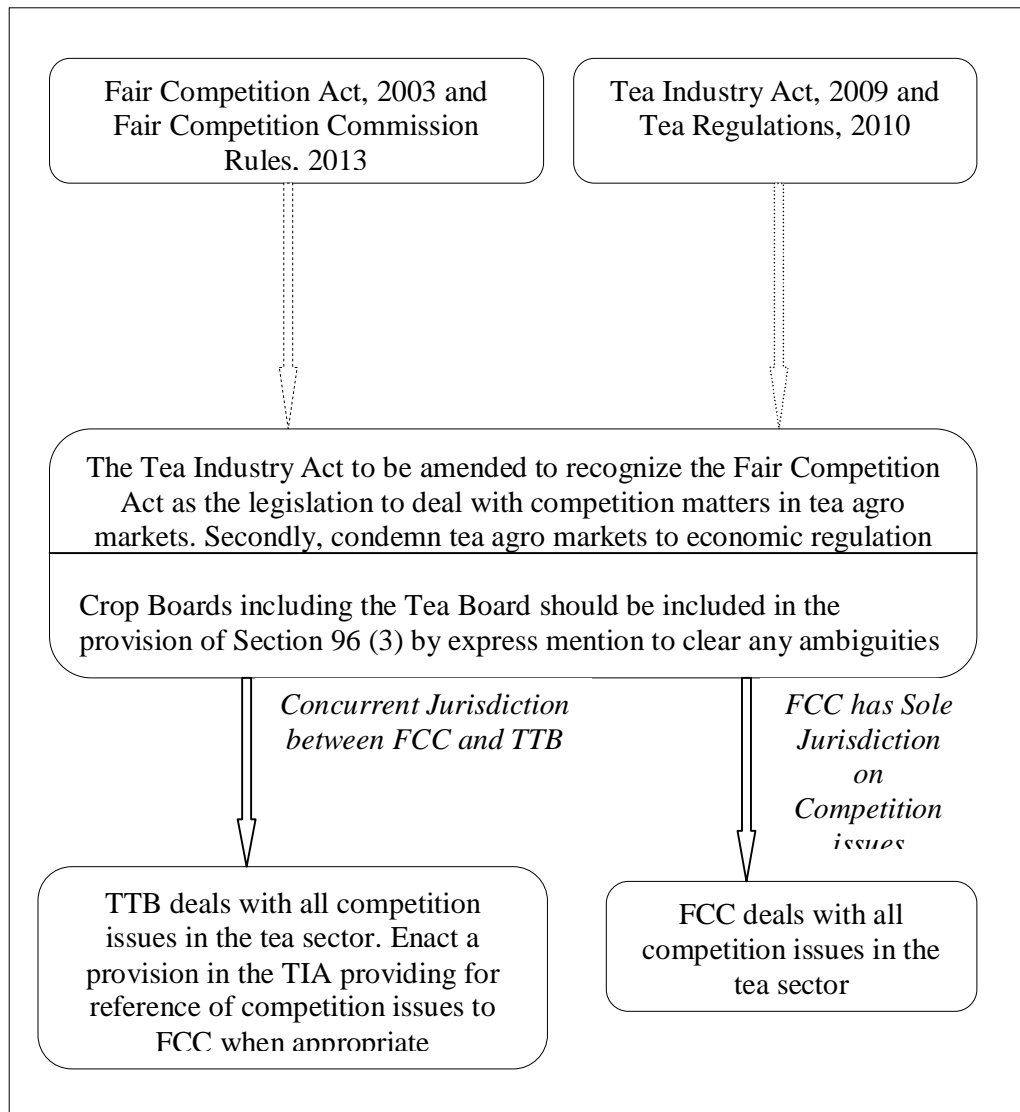


Figure 9: Proposed Market Enforcement Model

The foregoing provides for the plausible enforcement model arising from the interlink between sectoral and competition laws to provide for competitive market dynamics in the identified relevant markets thus answering the research question of this study.

5.4.7 Vertical Integration Issues

Regulations 12, 16 and 48 of the Tea Regulations, 2010 have partly created vertical issues in the relevant markets allowing green tea leaves buyers to integrate vertically backward to also engage in green tea leaves farming by way of estates as defined in Regulation 3 of the Tea Regulations, 2010 to mean an area of not less than 200 hectares of land planted with tea and has a primary processing factory attached to it. A combination of the huge tract of land and the processing factory is construed as combining buying, processing and growing of green tea leaves in one player.

Key informant interviews have shown that estates usually do not take good care of their green leaf tea and thus depend on the farmers' green tea leaves to improve on the quality of the made tea they produce as processors. As earlier described, the vertical integration has been giving the buyer an upper hand in the value chain and in particular the issue of price discovery to the detriment of the farmers.

Table 26: Farmers Response on the Driving Force Actor

District	Driving Force Actor (%)						Total
	Registered Buyers	Other Buyers	Farmers	Government	Tea Board	Others	
Mufindi	27.5	0	0.5	0.5	1.2	0	29.7
Muheza	28.7	0	4.2	0	0	1.2	34.1
Rungwe	30.5	0.5	1.2	0	3.6	0	35.2
Total	86.7	0.5	5.9	0.5	4.8	1.2	100

Furthermore, it is observed that the results were independent of districts the responses came from ($p > 0.05$, χ^2 value = 1.26) implying that the response is common to all green tea leaves farmers irrespective of their tea buying districts in the study. This shows that that buyer's dominance is felt all over the relevant

markets. As for the reasons for being the driving force, most (92%) of the responded were of the view that it is because they can determine prices. The fact that price is the factor considered to be of driving force in the relevant markets, and that it is actually the buyer who is considered the determinant player; the situation leaves the assertion by FIAS (2002) that the FCC should to be at the forefront to establish the determinants of the reduction of farmers' share into the export price over time wanting to date over ten years from the findings were released back in 2002.

Table 27: Distribution of Sources of Information in Setting Price in the Relevant Markets

Response	Districts			Total
	Mufindi	Muheza	Rungwe	
Information from Radio	0.5	0.9	0.0	0.9
Information from the Tea Board	20.5	10.0	30.9	40.9
Knowledge of the Buyers	17.3	12.7	21.8	34.5
From Clerks & Association	11.8	27.3	1.8	23.6
Total	50.0	50.0	54.5	100.0

Results on Table 27 show that green tea leaves buyers relied mostly on information from the Tea Board and on knowledge of the buyers in their respective relevant markets with (40.9%) and (34.5%) respectively.

Table 28: Distribution of Factors Considered in Setting Price in the Relevant Markets

Response	District			Total
	Mufindi	Muheza	Rungwe	
Listening to Neighbors	0.0	9.6	1.1	10.7
Take Buyers Offer	27.7	7.3	18.6	53.7
Information from the Tea Board	0.0	7.3	5.1	12.4
Negotiate with Buyer	6.2	1.7	8.5	16.4
All Stakeholders	0.0	6.8	0.0	6.8
Total	33.9	32.8	33.3	100

Results in Table 28 show that most (53.7%) of the green tea leaves buyers took buyers offer as a means of setting their price offer in the process of discovering actual price from the indicative price. These findings corroborate that of buyer's being the driver of the green tea leaves business in the relevant markets. Invariably, the results were dependent of districts the responses came from ($p < 0.01$, χ^2 value = 186.1) implying that the response is not common to all green tea leaves farmers irrespective of their tea buying districts in the study. This is explained by the fact that buyers in Muheza do not differentiate between indicative and actual price, thus the significance of the differentiated responses.

5.4.8 Competition Issues Profile in the Relevant Market

Based on the findings as discussed above and in consideration of the competition issues index as provided in the methodology, the study established the competition issues profile in the relevant markets as presented hereunder.

Table 29: Distribution of Competition Issues in the Relevant Markets

District	Anti competitive Harm						Total
	Vested interests	Vertical integration	Barriers to entry	Un. Merger	Cartel	AOD	
Mufindi	1	2	3	0	5	0	11
Muheza	1	2	3	0	5	0	11
Rungwe	1	2	3	4	0	5	15

The results in Table 29 connote an attempt to quantify nominal (qualitative) measure of the effects of the competition issues in the relevant markets based on the pre-determined index as discussed earlier in this study.

5.4.9 Draw Conclusions

Based on the findings that there are anti-competitive issues in form of abuse of dominance and un notified mergers in Rungwe, anti-competitive agreements in

Muheza and Mufindi, barriers to entry and vested interests affecting all the three identified relevant markets Hypothesis Two is answered not to the affirmative that there are anti-competitive conducts in the identified relevant markets as discussed above.

5.5 Gross Margins in the Identified Relevant Markets

In Table 30 gross margins for green tea leaves farmers under the different identified relevant markets are compared. The t-test aimed at testing how each of the relevant markets' gross margins compares to that of the control relevant market in the study area. Rungwe was chosen as the control relevant market based on the fact that it bears the largest number of farmers and also is the oldest green tea leaves area in Tanzania. Moreover, it is established to accommodate farmers beyond the green tea leaves part of the values chain by providing ownership in the processing phase of the value chain.

Table 30: Results for Comparison of Relevant Markets' Gross Margins

District	df	t	Mean GM	Std. Dev.	N	Sig. (2-tailed)
Mufindi	59	2.0	987431.57	2561700.5	60	0.048*
Rungwe	59	6.4	963360.25	3894986.1	60	
Muheza	59	4.1	754652.5	1026891	60	0.000**
Total			901814.77	2742631.2	180	

* Significant at 0.05 ** Significant at 0.0

The t test results show that farmers in both Mufindi and Muheza relevant markets had average gross margin of TZS 754 652.5 and TZS 987 431.57 respectively and that both were significantly different from that of Rungwe partly for the reasons explained earlier. Furthermore to triangulate the results, ANOVA results also suggest

significant difference between the marketing channels and within the individual marketing channel as in Table 31.

Table 31: ANOVA Results for Gross Margins' Differences in the Relevant Markets

Marketing channel	Df	F-ratio	Sig. (2-tailed)
Between relevant markets	2	13.65	.000**
Within marketing channel	117		
Total	119		
Bartlett's test for equal variances: Chi 2 (2)		83.6827	
Prob > Chi 2		0.0000**	

**Significant at 0.00

Based on the consistent statistical findings (t-test and ANOVA) that the gross margins are significantly different in identified relevant markets of this study; Hypothesis Three is answered not to the affirmative that the Gross margins are not the same for all the identified relevant markets.

5.6 Factors Affecting Pro Competition Functioning of the Relevant Markets Assessed in the Tanzanian Tea Sector

Table 32: Regression (GLS) Results on Factors Affecting Pro Competition Functioning of the Relevant Markets

Variable	Coefficients	Std. Error	Sig.
(Constant)	-13.5	90.8	.145
Age of respondent	.43248	.1479	.024*
Duration of tea farming training skills	.26004	.18954	.041*
Experience in tea leaves farming	.6112	.2011	.000**
Dummy for the marketing channel	.518	.542	.524
Number of mature tea trees	.200	.83	.034*
Index for competition issues	-1.284	.765	.025*
Distance from the farm to the green tea leaves buying centre (in meters)	-1.0957	.4093	.043*

Dependent Variable: Natural log of gross margin of producers

Adjusted R Square (R^2) 0.602 F value 59.698**

* Significant at 0.05

** Significant at 0.01

Coefficients estimated by GLS are known as elasticities which represent a causal-effect relationship amongst the dependent and independent variables in this research model. In economics, elasticity is the measurement of how responsive an economic variable is to a change in another. In empirical work an elasticity is the estimated coefficient in a linear regression equation where both the dependent variable and the independent variable are in natural logs. Elasticity is a popular tool among empiricists because it is independent of units and thus simplifies data analysis (Marks, 2003). Ideally, the interpretation of the results is such that a unit change (1) in independent variable causes a change (magnitude borne in the coefficient β 's). Since the said β 's are in decimals, they have been expressed in percentages for ease of readership and presentation of the findings. To this effect the unit change in independent variable is pegged at 10%.

The regression results in Table 32 based on the GLS estimator employed in this study show that age of the green tea leaves farmers had a positive sign and was a significant factor at ($p < 0.05$) implying that as the age of the green tea leaves farmers increased their gross margins also increased. This would be due to the fact that most producers were in the age group (40-60 years) with good adherence and commitment to green tea leaves farming requirements. Since coefficients estimated by GLS are elasticities, it thus follows that a 10% change in age of green tea leaves farmers led to 4.3 % increase in their gross margins in the identified relevant markets of this study.

It was also seen that 10% change in duration of tea farming training skills was significantly associated with 2.6 % increase of gross margin of green tea leaves

farmers at ($p < 0.05$). The variable had a positive sign, indicating that the more time spent on training the more the gross margin. It is logically true that as one learns more on tea farming training skills both practically and theoretically, their farm outputs are commensurately expected to increase. A ten percent change in years of green tea leaves farming was significantly (highly) associated with 6.1% change in green tea leaves farmers' gross margins at ($p < 0.01$), meaning that many years of farming brought about an overall advantage in gross margin of a green tea leaves farmers.

The number of mature tea trees in a farm was also a significant factor at ($p < 0.05$). It was also observed that a 10% change of the number of mature trees was associated with a 2% increase of green tea leaves farmers' gross margin as the variable had a positive sign. This can be explained further by the fact that mature trees are the ones that bear green tea leaves so the more trees (to optimal level) the more green tea leaves and thus the higher the gross margins *ceteris paribus*.

A 10% change of the distance from the farm to the green tea leaves buying centre (in meters) was found out to be significant associated with 11% decrease in gross margin of producers at ($p < 0.05$). Since this variable (distance from the farm to the green tea leaves buying centre) was a proxy in measuring the effect of remoteness of the farms to the gross margins, the results suggests that as the distance decreased the gross margins increases implying that remoteness as defined affected gross margins negatively. This could be due to additional costs incurred in the process of bringing the green tea leaves to the buying centre.

Regarding the index for competition issues, results show that a 10% change of the index for competition issues score was found out to be associated with 13% decrease in gross margin of the green tea leaves farmers at ($p < 0.05$). This variable was formulated as a proxy in measuring the effect of anticompetitive effects faced by farmers in their respective identified relevant markets to the gross margins, the results suggests that as the index for competition issues score decreased the gross margins increases implying that anticompetitive effects as defined affected gross margins negatively. This could be due to either additional costs or loss of revenue as a result anti-competitive harm that the competition issues inflicted onto the green tea leaves farmers in the identified relevant markets in this study.

The dummy variable for the marketing channel was insignificant ($p > 0.05$). This notwithstanding, this variable had a negative sign thus going against the theory that institutions (such as marketing channels) reduce transaction cost and increases returns (gross margins for this study). This can be explained by the fact that benefits can be qualitative such as price stability and easing of liquidity which were not captured by this study.

The explanatory power of the model adjusted R^2 was found to be 0.602 implying that 60.2 % of the variations in the dependent variable (gross margins of green tea leaves farmers) were explained by the variations in the independent variables in the model. The model was powerful enough to explain the variations as it had an F- value of 59.698, which was also highly significant at ($p < 0.01$). This meant that the model was well estimated.

Based on the findings that age of the green tea leaves farmers, duration of tea farming training skills, experience in tea leaves farming, competition issues, number of mature tea trees and distance from the farm to the green tea leaves buying centre (in meters) in the identified relevant markets affect pro competition functioning of the identified relevant markets in this study; Hypothesis Four is answered not to the affirmative that there are factors affecting pro competition functioning of the identified relevant markets as discussed above.

CHAPTER SIX

CONCLUSION AND RECOMMENDATIONS

6.1 Chapter Overview

This chapter covers the conclusions that the study has made from the discussions of the findings based on the operationalized objectives which were eventually subjected to testing of hypotheses and answering of a research question. Furthermore, the chapter covers recommendations which have been rhymed with the conclusions and presented in two folds of policy recommendations and the recommendations for further studies.

6.2 Conclusion

This study has four objectives and from the same several findings emanated from the analyses done with respect to operationalisation of the objectives and testing of the hypotheses using the described methodologies as discussed in earlier chapters of this study. The following are the conclusions drawn from the foregoing.

With regards to the first objective of this study which was to assess the adequacy of provisions of the legal and regulatory framework and its resulting value chain in providing for competitive market dynamics in the identified relevant markets. It was concluded that there is prevalence of market structural condition requiring economic regulation in the identified relevant markets. Invariably, it was further concluded that the current legal provisions are wanting thus inadequate to provide for competitive market dynamics and a contestable value chain in the identified relevant markets.

The second objective was to identify relevant markets and anti-competitive conducts in the identified relevant markets as per the competition assessment framework. It is concluded that the identified relevant markets are the buying and selling of green tea leaves in Rungwe tea growing district, the buying and selling of green tea leaves in Mufindi tea growing district and the buying and selling of green tea leaves in Muheza tea growing district. Furthermore it is concluded that there are anti-competitive issues in form of abuse of dominance and unnotified mergers in Rungwe, anti-competitive agreements in Muheza and Mufindi, barriers to entry and vested interests in all the three identified relevant markets in this study.

Invariably, is observed that the buying and selling of green tea leaves in Rungwe tea growing district more efficient than those for Mufindi and Muheza, because the prevailing market structure for Rungwe is more favourable to existence of competition among actors. It is also conclusively observed that the buying and selling of green tea leaves in Mufindi and Muheza is more competition efficient than that for Rungwe because the prevailing market structure is most favourable to existence of competition among actors. Furthermore it is concluded that the buying and selling of green tea leaves in Mufindi is more oligopsonistic than those for Rungwe and Muheza, because the prevailing green tea leaves market structure is more favourable to existence of competition among actors.

The third objective had sought to assess and compare the performance of identified relevant markets in the competition assessment framework perspective. Gross margins were used a proxy measure for performance of the identified relevant markets. Consistently, triangulated statistical results (t-test and ANOVA) showed

that the gross margins are significantly different in the identified relevant markets of this study and thus the conclusion attached thereto.

The fourth objective had dwelt with the identification of the factors affecting pro competition functioning of the identified relevant markets. GLS results as triangulate with cross tabs and key informant interview findings herewith show that the age of the green tea leaves farmers, duration of tea farming training skills, experience in tea leaves farming, competition issues, number of mature tea trees and distance from the farm to the green tea leaves buying centre (in meters) in the identified relevant markets do affect pro competition functioning of the identified relevant markets in this study; invariably this objective is concluded as per the later assertion herein above.

6.3 Recommendations

6.3.1 Policy Recommendations

Based on the foregoing findings and conclusions, the current study puts forward a set of recommendations that might be a starting point or addition already existing body of knowledge regarding competition issues in the identified relevant markets. The recommendations are as hereunder provided.

There should be a deliberate and concerted effort between the Fair Competition Commission and the Ministry responsible for the relevant markets that aims at developing a comprehensive legal and regulatory framework to provide for economic regulation in the identified relevant markets so as to ensure fore openness and

continuous contestability of the value chain for the better welfare of the green tea leaves farmers.

The anti-competitive issues in form of abuse of dominance and unnotified mergers in Rungwe, anti-competitive agreements in Muheza and Mufindi should be thoroughly investigated by the Fair Competition Commission and upon satisfaction of the alleged infractions; requisite cases should be instituted against the culprits. Invariably, the barriers to entry and vested interests identified in all the three identified relevant markets in this study should be pursued as matters of competition advocacy by the Fair Competition Commission in collaboration with the Ministry responsible for the relevant markets.

The Fair Competition Commission and the Ministry responsible for the relevant markets should collaborate in inventing an incremental programme that shall ensure the percentage of green tea leaves farmers' gross margins in the export price for the made tea is at a level deemed equitable on the face of record.

The Fair Competition Commission and the Ministry responsible for the relevant markets should embark on advocacy and awareness creation programmes with the green tea leaves farmers educating them on business acumen and in particular competition issues related to the green tea leaves farming business and the need for application of good agronomic practices in green tea leaves farming business. The advocacy and awareness creation programmes shall ensure that the identified for pro competition functioning in the relevant markets are either created, increased or sustained as the case may be in the identified relevant markets.

6.3.2 Recommendations for Further Studies

The study recommends that there should be undertaken studies advancing the course of the proposed enforcement model in other related agro markets in an attempt to resolve seemingly homogeneous statutorily provided market failures.

REFERENCES

- Alchian, A. A. (1950). Uncertainty, Evolution and Economic Theory. *The Journal of American Bar Association (ABA) (2007)*. Section of Antitrust Law. Antitrust Law.
- Arora, R. R. and Sarkar, R. (2008). *Detecting Cartels in the Indian Cement Industry: An Analytical Framework*, Industrial and Management Engineering Department, IIT Kanpur.
- Baca, J. F. (2007). Lecture Notice on Competition Training held by Nathan Associates at Kunduchi Beach Hotel in Dar es Salaam.
- Barry, R. and Argus, M. (2008). *Competition Law and Policy in the EC and UK*. 4th Edition. Developments, 6th Edition, Vol. 2007.
- Bikker, J. and Haaf, K. (2002). *Competition, Concentration and their Relationship: An Empirical Analysis of the Banking Industry*. *Journal of Banking and Finance*. Volume 26, 2191-2214.
- Binswanger, H. P. and McIntire, J. (1987). *Behavioral and Material Determinants of Production Relations in Land Abundant Tropical Agriculture*. *Econ Dev Cult Change* 36:73–99.
- Bork, R. H. (1978). *The Antitrust Paradox: A Policy at War with itself*. New York: Basic Books Inc. Xi and pp. 462.
- Bork, R. H. (1993). *The Antitrust Paradox*. Free Press, USA.
- Burling, J. (2004). *Antitrust and Competition Law Update: F. Hoffman-La Roche Ltd. v. Empagran*. The Berkeley Electronic Press, California, USA.
- Chekwti, C. (2013). *Competition Pressure and Agro-Processing: Firm Level Evidence from Uganda, Tanzania and Kenya*.

- Clark, C. (1940). (Revised and Reprinted in 1951). *The Conditions of Economic Progress*. London: MacMillan & Co. Ltd.
- Coase, R. (2000). The New Institutional Economics Challenges in Developing Economies. *Developing Areas Journal* 21: 63-74.
- CTC, (2015). *Competition and Tariffs Commission: Competition Policy for Zimbabwe*, Harare, Zimbabwe.
- Daly, K. and Zhang, X. (2011). "China's Banks Ownership and Performance. Working Paper Series, SSRN.
- Demsetz, H. (1973). Joint Supply and Price Discrimination. *Journal of Law and Economics*, University of Chicago Press, Vol. 16(2), pages 389-405.
- Dickson, P. (2014). Commercial Banks Competition in Tanzania: Application of the Modified Panzar-Rosse Model. *European Journal of Business and Management*. Vol.6. No.19.
- Dutta, P. (1994). *Moral Hazards: Handbook of Game Theory*. R. J Aumann Ltd., Amsterdam. 269pp.
- Ellis, F. (1992). *Agricultural Policies in Developing Countries*. Cambridge University Press, London. pp 56.
- Fair Competition Commission (2008). FCC presentation to Justice of Appeal, Dar es Salaam, Tanzania
- FCC (2014). Fair Competition Commission: Annual Report for the Year Ending June 2014, Dar es Salaam, Tanzania.
- FCC (2015). Fair Competition Commission: Annual Report for the Year Ending June 2015, Dar es Salaam, Tanzania.
- Ferrara, A. (2010). *Cost-Benefit Analysis of Multi-Level Government: The Case of EU Cohesion Policy and US Federal Investment Policies*. London and New York.

- FIAS-Foreign Investment Advisory Service (2002). *Assessing Competition Issues: A Sectoral Review, Tanzania Direct Foreign Investment and Competition Policy: Issues and Recommendations*, *World Bank*.
- Friederiszick, H. W. and Maier-Rigaud, F. P. (2007). *The Role of Economics in Cartel Detection in Europe*. The More Economic Approach to European Competition Law, 178-196.
- Galbraith, J. K. (1967). *The New Industrial State, 2nd edition* (Harmondsworth, Penguin, 1972), originally published 1967.
- Gibbs, C. and Bromeley, D. (1990). Institutional Arrangement for Management of Rural Resources: Common Property Regimes. *American Journal of Agricultural Economics* 73 (3): 601-614.
- Horowitz, J. and Currie, D. (2007). Another Instance where Privatization Trumped Liberalization: The Politics of Telecommunications Reform in South Africa: A ten-year Perspective. 31 *Telecommunications Policy* 445-462.
- Hovenkamp, H. and Areeda, P. (2004). *The Fundamentals of Antitrust Law*. Aspen Publishers, USA.
- Kahyarara G, (2011). *Market Competition and Performance of Tanzanian Manufacturing*. University of Dar-es-Salaam, Tanzania.
- Khemani, R. S. and Shapiro, D. M. (1993). An Empirical Analysis of Canadian Merger Policy. *The Journal of Industrial Economics* 41(2): 162-77.
- Kigwala, Y. J. (2015). *Competition Law in Relation to Price Fixing in Tanzania: A Case of Communication Industry*. A Graduate Essay Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Laws in Corporate and Commercial Law of the University of Dar es Salaam.

- Kilem Li, G. (2011). *The Practical Guide to Statistics: Applications with Excel*. Advanced Analytics, LLC.
- Kothari, C. R. (2006). *Research Methodology: Methods and Techniques*. New Age International Publisher, New Delhi, India.
- Koutsoyiannis, A. (1985). *Modern Microeconomics Second Edition*. Macmillan Publishers Ltd., London. 260pp.
- Levenstein, M. C. and Suslow, V. Y. (2006). What Determines Cartel Success? *Journal of Economic Literature*, 44(1): 43-95. DOI: 10.1257.
- Lipsey, R. G. and Lancaster, K. (1957). *The General Theory of Second Best: Review of Economic Studies* 24, 11-32.
- Marks, S. (2003). *The elasticity of scale and the shape of average costs*. American Economic Review. Washington, USA.
- Massimo, M. (2004). *Competition Policy: Theory and Practice*. Cambridge University Press. Business & Economics – 616 pages.
- Massimo, M. (2006). *Fighting Cartels: Economic Analysis and European Union Experience*, European University Institute, Barcelona.
- Mayoux, L. (2006). *Quantitative, Qualitative or Participatory? Which Method, For What and When?* In Desai, Vandana and Robert B. Potter (Eds.).
- Merriam-Webster (2010). *Online Dictionary*. Retrieved on 12th January 2011.
- Mfungahema, R. C. (2014). *Competition Assessment of Tanzania Telecoms Market*. Tanzania Communication Regulatory Authority. Dar es Salaam, Tanzania.
- Mighell, C., Ronald, L. and Jones, A. (1993). *Vertical Coordination in Agriculture. Agricultural Economics Report No19*. US Department of Agriculture, Economic Research Services. pp 14-16.

- Mill, J. S. (1859). *On Liberty*: Online at the Library of Economics and Liberty, Chapter V, 4th Edition, London.
- Mitchell, L. (2003). *Economic Theory and Conceptual Relationships between food Safety and International Trade*. In: Buzby, J.C. (ed.); *International Trade and Food Safety- Economic Theory and Case Studies*. USDA Agricultural Economic report No. 828, Pp.10-24.
- Mlulla, A. S. (2005). *A Contextual Analysis of Value Adding and Trade Competitiveness in Cross-Border Export Market in Northern Tanzania*. *African Journal of Finance and Management*. Vol. 13. No. 2. Dar es Salaam, Tanzania.
- Mlulla, A. S. (2014). *Efficacy of Regulatory Authorities' Justice Provision in Tanzania: The Case of the Energy and Water Utilities Regulatory Authority*. A Dissertation Submitted in (Partial) Fulfilment of the Requirements for the Degree of Bachelor of Laws of the University of Bagamoyo.
- Mlulla, A. S. (2015). *Regulation of Mergers and Acquisitions in Tanzania: Legal and Practical Challenges*. A Graduate Essay Submitted in Partial Fulfilment of the Requirements for the Degree of Master of Laws in Corporate and Commercial Law of the University of Dar es Salaam.
- Mulla, A. S. (2003). *Cross Border Trade in Northern Tanzania: The Effect of Market Exchange arrangements and institutions on values of non-traditional export crops*. Thesis submitted as partial fulfilment of the requirements for the degree Msc. of Agricultural Economics of Sokoine University of Agriculture, Morogoro, Tanzania.
- North, D. (1990). *Institutions, Institutional Changes and Economic Performance*. Cambridge University Press, Oxford. 124pp.

- O' Donoghue, T. and Punch, K. (2003). *Qualitative Educational Research in Action: Doing and Reflecting*. Routledge. pp 78.
- Online Business Dictionary: [www.businessdictionary.com]: Retrieved on 12th September 2015.
- Petersmann, E. U. (2006). *Role of Competition Policy in Providing More Equitable Playing Field for Development in Globalizing Markets: Challenge for Governments and Multilateral Organizations*. UNCTAD Series on Issues in Competition Law and Policy, United Nations, Geneva Political Economy, Volume 58, Issue 3, pp 211-221.
- Philip, K. (2001). *A Framework for Marketing Management*, Prentice – Hall, Inc. Upper Saddle River, New Jersey.
- Pomeroy, R. S. and Trinidad, A. C. (1995). *Industrial Organisation and Market Analysis: Fish marketing*. In: Prices, Products and People; Analysing Agricultural Markets in Developing Countries; (Edited by Scott, G. J.) James Currey Ltd., Oxford. pp 289.
- Posner, R. A. (1972). *Economic Analysis of Law*. University of Chicago Law School, IL, Boston: Little, Brown. Chicago, USA.
- Posner, R. A. (2001). *Antitrust Law*, The University of Chicago Press. Chicago, USA.
- Putman, R. (1993). *Making Democracy Work: Civic Tradition in Modern Italy*. Princeton University Press. Princeton, USA.
- Ross, D. (2009). *Antitrust Enforcement and Agriculture*. A Paper Presented in the American Farm Bureau Policy Development Meeting August 20, 2002 in Kansas City, Missouri, United States of America.

- Scherer, F. M. (2009). *On the Paternity of a Market Delineation Approach*. Working Paper. American Antitrust Institute. United States.
- Schumpeter, J. A. (1942). *Capitalism, Socialism and Democracy*. Harper and Row: New York.
- Silomba, L. B. (2000). *Structure and Performance of Bean Marketing System in Tanzania: A case of Kigoma Region*. Unpublished Dissertation for the Award of MSc Degree at Sokoine University of Agriculture, Morogoro, Tanzania, pp. 110-112.
- Smith, A. (1776). *An Inquiry into the Nature and Causes of the Wealth of Nations*. Vol (I), R. H. Campbell and A. S. Skinner, ed Libett Fund: Indianapolis.
- Stein, H. (1994). Theories of Institutions and Economic Reforms in Africa. *World Development Journal* 22 (12): 1833-1840.
- Stigler, G. J. (1951). The Division of Labour is limited by the extent of the Market. *The Journal of Political Economy*, 59 (3), 185-193.
- Strutz, T. (2010). *Data Fitting and Uncertainty (A practical introduction to weighted least squares and beyond)*. Vieweg and Teubner Publishers Limited. NJ: Prentice Hall, USA.
- Sullivan, L. and Grimes, W. (2006). *Horn book on the Law of Antitrust*. Thomson West, USA.
- Taimoon, S. (1999). *Globalization, Competition Policy and International Trade Negotiations*. Consumer Unity Society of India (CUTS).
- Tea Board of Tanzania, (2015). *Report of the Tea Sector 2000 – 2014*. Retrieved on 12th September 2015.
- Temu, A. (1999). *Empirical Evidence of Changes in the Coffee Market after Liberalisation: A case of Northern Tanzania*. Unpublished Dissertation for

Award of Degree of Doctor of Philosophy at Illinois University, Urbana, USA,
pp. 110-114.

The American Bar Association (ABA) (2007). *Model Code of Judicial Conduct: What does it mean to Commercial Competition Court Judges?* Washington, USA.

U. S. Department of Justice and the Federal Trade Commission (2010). *Horizontal Merger Guidelines*.

Ugula, K. P. (2013). *Adjudication of Competition Disputes in Tanzania: Law and Practice*. A Graduate Essay Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Laws in Corporate and Commercial Law of the University of Dar es Salaam.

UNCTAD (2007). *Peer Review Report for Tanzania, Zambia and Zimbabwe*. United Nations Publication, New York and Geneva

Wang'ombe, F. (2013). *Promoting Competition in Key Agribusiness Markets in Kenya*. Paper presented to a Pre ICN Meeting in Warsaw, Poland.

Weiser, P. J. (2009). *Toward a Competition Policy Agenda for Agriculture Markets*. Paper Presented at the Conference for the Organization for Competitive Markets on the 7th August 2009 at the Antitrust Division, US Department of Justice, Washington, USA.

Whish, R. (2003). *Competition Law, 5th Ed*, London, Butterworths.

Williamson, O. E. (1993). The Evolving Science of Organisation. *Journal of Institutional and Theoretical Economics* 149:36-63.

World Bank, (2013). *Making Markets Work for Development: A Reform Agenda on Competition*. Paper presented to the Pre-ICN Forum on the 23rd April, 2013, in Warsaw Poland.

World Bank, (2015). *Agribusiness*. Online Article found on www.worldbank.org.

Website visited on the 7th October 2015 at 1652 hrs.

World Bank and DFID, (2008). *Competition Assessment Framework: An operational guide for identifying barriers to competition in developing countries*. The

World Bank Group. Washington DC, USA.

APPENDICES

Appendix 1: Producer Questionnaire

**QUESTIONNAIRE FOR THE STUDY TITLED COMPETITION
ENFORCEMENT AND EFFICIENCY IN RELEVANT MARKETS: THE
APPLICATION OF COMPETITION ASSESSMENT FRAMEWORK IN THE
TANZANIAN TEA AGROMARKETS**

Producer Questionnaire

A: BACKGROUND INFORMATION

Respondent's Number.....

Name of Enumerator:.....

Date of Enumeration:.....

1. Location Data

(a) Village name.....

(b) Ward:.....

(c) Division:

(e) District:.....

2. Bio Data of the Respondent

(a) What is your Age (Years)

(b) What is your Highest Level of Education

1. None 2. Primary School 3. Secondary 4. Tertiary

(c) Duration of Tea Growing Skills (Number of days).....

3. Do you sell you Tea Leaves to a Green Tea Leaves Processor

1) Yes 2) No.

If No. Drop the Respondent.

If Yes. Proceed as hereunder.

4. What is the name of the Green Tea Leaves Processor

5. In case there is more than one Green Tea Leaves Processor in your Tea Growing District. Are you allowed choose from among them?

Explain

.....
.....

Are you allowed to sell to any other Green Tea Leaves Processor outside your Tea Growing District?

1) Yes 2) No.

If you Answer Question 6 with No.

6. At what price difference would you risk to sell outside your Tea Growing District?

Explain

.....
.....

B: VALUE ADDING PROCESS (THE VALUE CHAIN)

7. Where do you belong as a Smallholder Tea Grower
- 1) Small Holder Tea Group 2) Small Holder Tea Association 3) Individual Farmer
- 4) Institution 5) Others (specify).....
8. For how long have you been involved in green tea leaves trade (number of ears).....
- Period covered e.g. (1990 – 1995)

Association/Group

9. Do you belong to any green tea leaves (a) Association (b) Group? (Tick the correct)
- 1) Yes 2) No.

If No. Go to Question No. 14. If Yes. Go to Question No. 11

If Yes .Why did you join the green tea leaves Association/Group?

- 1) To secure good prices 2) Risk sharing 3) Requirement of law
- 4) Others (specify).....
10. How effective is the green tea leaves Association/Group?
- 1)Very effective 2) Fairly effective
- 3) Not effective 4) I don't know.
11. Did you have any contract with the Green tea leaves Association/Group?
- 1) Yes 2) No.

12. Did the Association/Group have any contract with the Green Tea Leaves Processor?

- 1) Yes 2) No. 3) I don't know

(Note that belonging to an association is treated as a form of contact)

Individual Farmer/Institution / Other

(Make sure you interview Leaders of Institutions/Association/Group whichever applicable)

13. (If you responded with No for Question No. 10.) As whom do you trade?

- 1) Individual Farmer 2) Institution 3) Others

14. To whom do you sell your green tea leaves?

- 1) Green Tea Leaves Processing Factory 2) Small Holder Tea Association 3) Small Holder Tea Groups 4) Others (specify).....

15. Did you have any contract with the Green Tea Leaves Processor last season?

- 1) Yes 2) No.

If the Answer for Either Question 12 or 13 is Yes. Please answer 1-5 below:

(i) Period in which the contract was entered (Dates, characteristic of the crop)

.....

(ii) Inspection. Was there any inspection done? If Yes. Who did the inspection?

.....

.....

(iii) Pricing. What was the basis for pricing the tea leaves? (Who set the price? Did you negotiate?).....
.....

(iv) Payment arrangement (Was there any down payment? How was it determined? When was it paid? When was the balance paid? Was there interest attached?).....
.....
.....

(v) Documetation. Was there any written document for the contract? (See if you can have it).....
.....
.....

For the contracts entered either that in question 12 or 13. Please answer Questions 14-17

16. What advantages have you gained from the contract you entered into?
.....
.....

What problems have you encountered from the contract you entered into?
.....
.....

Have you experienced a breach of contract?

- 1) Yes.
- 2) No.

17. Where was the dispute resolved (specify who was present and who defaulted any fee paid if any)

.....
.....

If Yes. What was the penalty / compensation (specify)

.....
.....

18. How often do you change the Buyer you trade with and/or enter into contract with

1) Very often 2) Very rare

For whatever the answer above specify reasons

.....
.....

19. If you did not enter into green leaf sale agreements system this season. Who are you selling your tea leaves to? (**Note that Belonging to an association is treated as a form of contact**)

1) Individual buyers (middlemen) 2) Others (specify).....

20. What were the arrangements?

.....
.....

(Proceed with All Respondents)

21. How did you determine your selling prices?

- 1) Listening to neighbours
- 2). Take buyers offer
- 3). Information from the Tea Board
- 4) Negotiate with buyer
- 5) Other (specify).

.....
.....

22. What are your indicators for price setting?

- 1) Information from Radio
- 2). Information from the Tea Board
- 3) Knowledge of the buyers market (Mombasa Auction Vs World Market Price)
- 4). Others (specify).

.....
.....

23. What major factors did you consider when you sold your green tea leaves?

- 1) Price offered
- 2) Personal ties with buyer
- 3) Household cash needs.
- 4) Penalty from last last season
- 5) No alternative marketing outlet
- 6) Others (specify).....

24. How far (metres/kilometres) is your farm from the Green Leaf Tea Buying centre?

25. What time does it take to get to the Green Leaf Tea Buying centre (remoteness)

C: PERFORMANCE OF IDENTIFIED RELEVANT MARKETS

What are the variable costs you incurred on the green tea leaves enterprises lasts season.

Fill in the box below

Item	Amount (TZS)
Weeding	
Pruning	
Transport (to the Green Leaf Buying centre)	
Spraying tool (hiring)	
Chemicals	
Fertilizer	
Protective gears	
Plucking (Labour)	
Plucking baskets	
Others (specify)	
Total	

26. What was your crop value for green tea leaves in the last season?

Fill in the box below

Quantity of Tea Leaves (Kgs)	Price (TZS)	Total (TZS)	Deduction from Total (TZS)	Net to Farmers (TZS)
Total				

(Insist on getting Totals if the details are not easily availed)

D: FACTORS AFFECTING PERFORMANCE IN THE IDENTIFIED RELEVANT MARKETS

27. For how many years have you been Farming and Selling Tea Leaves

.....

28. (a) What is the acreage of your farm?.....

(b) What is the acreage with mature tea in your farm?.....

- (c) What is the acreage with immature tea in your farm?.....
- (d) What is the number of mature trees in your farm?.....
- (e) Number of immature trees (not harvested) in your farm?.....
- (f) What is the vacant percentage in your farm?.....

29. Did you give “KICK BACK” (forced to give tea leaves for free or at a reduced price) to the buyer last season?
1) Yes 2) No
If Yes. How many (kg) of tea leaves

D: GOVERNMENT ROLE

- 30. What does the government both district and central do to facilitate Greenleaf tea marketing?
.....
.....
- 31. What do you expect the government to do to improve Greenleaf tea marketing in the future (price and others)?
.....
.....
- 32. How do political leaders’ attitude towards the Greenleaf tea trade? Affect your business (Positive/supportive or negative/restrictive). Explain.
.....
.....

E: DRIVING FORCE ACTOR / GROUP

33. Whom do you think is/are driving force group /actors in the chain of marketing of tea leaves?
- 1) Tea Processors/Buyers 2) Other Buyers (if any)
 - 3) Farmers 4) Government 5) Tea Board of Tanzania
 - 6) Others specify.....

34. Why do you think the above group actors are the driving force? (Specify).

.....

.....

35. What do you think are the requirements (that you do not have) to join the group above?

.....

36. What do you think are the requirement to sell green tea leaves to buyers profitably.....

.....

.....

36(a) How do you assess the legal requirement that “Buyers” must have a processing plant? Explain.....

.....

.....

F: COMPETITION RELATED MATTERS

37. Have there been instances where buyers decreased prices below competitive levels (buy green tea leaves at a price lower than actual price agreed)? If Yes. Describe the acts.

.....
.....
.....

38. Have there been instances where buyers have prevented smaller competitors from increasing their market shares? Describe the acts.

.....
.....
.....

39. Have there been instances where buyers have discouraged market entry (engage in an exclusionary act)? Describe the acts.

.....
.....
.....

40. Have there been instances where buyers or farmers have been favoured by virtue of politics, including funding for political parties from sector interests (vested interests).

.....
.....
.....

41. Have there been instances where buyers have refused to give competitor access to essential facility (denial/restrictions of access to processing plant facilities)?

.....

42. Have there been instances where competitors sometimes collude to limit the intensity of competition by making agreements to fix prices, to divide the market between them, to conduct boycotts or to rig bids for contracts?

.....

43. Have there been instances where competitors have engaged in mergers and acquisitions amongst themselves?

.....

44. Please complete the following Table below:

Competition Harm Index

Anti competitive harm	Weight (w) Assigned	Assigned Score
Vested interests	≤ 1	
Vertical integration	≤ 2	
Barriers to entry	≤ 3	
Un notified mergers	≤ 4	
Cartels	≤ 5	
Abuse of market power	≤ 5	
Total		

THANK YOU FOR YOUR RESPONSES

Appendix 2: Buyers Questionnaire

QUESTIONNAIRE FOR THE STUDY TITLED COMPETITION ENFORCEMENT AND EFFICIENCY IN RELEVANT MARKETS: THE APPLICATION OF COMPETITION ASSESSMENT FRAMEWORK IN THE TANZANIAN TEA AGROMARKETS

Buyers Questionnaire

A: BACKGROUND INFORMATION

Member of Respondent

Name of Enumerator

1. Have you ever bought green tea leaves from farmers?

1).Yes 2). No

2. Are you allowed to buy from any other Green Tea Leaves Processor outside your Tea Growing District?

Explain.....
.....

2(a) Are you allowed to buy from growers outside your Tea Growing District?

Explain
.....
.....

3. At what price difference would you risk to sell / buy outside your Tea Growing District?

.....
.....

4. For how long have you been involved in green tea leaves trade (number of years)..... Period covered e.g. (1990 – 1995)
5. What was the average volume of trade (tones or number of tea leaves) for the period
6. How did you acquire business capital.....

Fill in the Table below

Source	Yes	No	Amount
Own saving			
Borrowed from relative			
Borrowed from a formal institution			
Grant			
Other (specify)			

B: VALUE ADDING PROCESS

Vertical Integration Backwards

7. Which category of Small Holder Farmers do you trade with?
 - 1) Small Holder Farmers Associations
 - 2) Small Holder Farmers Groups
 - 3) Individual Farmers
 - 4) Institutions
 - 5) Other (specify).....
8. Do you have contract with Individual Farmers/Institutions / Associations/Groups?
 - 1) Yes 2) No.

If Yes.

Contracts between Buyers and Categories of Farmers (Last Season)

SN	Party to the Contract	Number of Contracts
1	Small Holder Farmers Associations	
2	Small Holder Farmers Groups	
3	Individual Farmers	
4	Institutions	
5	Other (specify)	
	Total	

(a) For how many years have you been having these contracts.....

(b) How many contracts did you have when you started business

.....

(c) How many of these farmers are in contract with you for the first time.....

9. How did you come in contact with the farmers

1) They approached me 2). Through village leadership 3) I approached them 4) other (specify).....

10. Do you buy green tea leaves from farmers without contracts?

1) Yes 2) No

If Yes / No

11. Which system (non-contract or contract) is more effective/efficient and why?

.....

12. How do you compare the contract system in terms of advantages and disadvantages?

.....

13. How does the exchange of green tea leaves occur (from the farmers to buyer).

.....
.....

14. Is there a contract at the point of exchange? If No. Why?

.....

15. How do farmers get paid green for their green tea leaves by the buyers?

.....
.....

16. Do you also grow Green Leaf Tea?

If Yes. Give % Distribution % Farmers %

Own Produce

Vertical Integration Forward

17. How do you sell your Made Tea?

- 1) Through direct sell to Local Packers
- 2) Through direct sell to International Packers
- 3) Through direct sell to Local Blenders
- 4) Through direct sell to International Blenders
- 5) Through Auction sell to Local Packers
- 6) Through Auction sell to International Packers
- 7) Through Auction sell to Local Blenders
- 8) Through Auction sell to International Blenders
- 9) Through Own Auction sell at Mombasa Auction

18. How do you compare direct sell to Auction channels of selling green tea leaves? Explain

.....
.....

Which among Direct Sell and Auction channels of selling green tea leaves do you prefer? Why? Explain

.....
.....

19. How do you decide on the indicative buying price of green tea leaves to the farmers?

.....
.....

20. What are the main factors considered in actual buying price setting?
(Common practice)

.....
.....

21. Have you ever sold your made tea at the Mombasa Auction? If Yes. Explain your experience.....

.....
.....

If No. Explain why you have not?

.....
.....

22. What do you think are the special conditions for made tea to be sold through the Mombasa auction (specify).

.....

23. Do the conditions differ from those required while selling locally?

.....

C: PERFORMANCE OF IDENTIFIED RELEVANT MARKETS

24. What was your Crop Value last season?

Quantity of Made Tea	Price per Kg in (TZS)	Estimated total value (TZS)
Total		

25. What variable costs did you incur last season?

ITEM	AMOUNT (TZS)
Purchase of Produce / Green tea	
Labour	
Communication	
Transport	
Taxes and levies	
Enforcing contracts	
Others (specify)	
Total	

(Insist on getting at least the Totals, both out growers and the farmers if details cannot be easily available)

D: POLITICAL, GOVERNMENT AND ORGANISATIONAL ASPECTS

26. How do you find the attitude and conduct of political leaders towards this green tea leaves trade?

.....
.....

27. How does their attitude and conduct affect your business?

.....
.....

28. What do you think should be the role of government in this green tea leaves trade?

.....
.....

29. Whom do you think is the driving force/ actor in this chain and why?

(Farmers/Government/Tanzania Tea Board/Processors/Big Buyers
Abroad/Blenders/Packers)

.....
.....

30. Are you registered anywhere else (in Local Governments) as a green tea leaves buyer?

1). Yes 2). No.

31. If Yes. Where are you registered? What is the fee for registration? What are the benefits compared to non registered buyers (specify)

.....
.....

32. What is your assessment of the possession of processing plant legal requirement? (specify)

.....
.....

E: COMPETITION RELATED MATTERS

33. Have there been instances where buyers decreased prices below competitive levels (buy green tea leaves at a price lower than actual price agreed)? If Yes. Describe the acts.

.....
.....

34. Have there been instances where buyers have prevented smaller competitors from increasing their market shares? Describe the acts.

.....
.....

35. Have there been instances where buyers have discouraged market entry (engage in an exclusionary act)? Describe the acts.

.....
.....

36. Have there been instances where buyers or farmers have been favoured by virtue of politics, including funding for political parties from sector interests (vested interests).

.....
.....

37. Have there been instances where buyers have refused to give competitor access to essential facility (denial/restrictions of access to processing plant facilities)?

.....

38. Have there been instances where competitors sometimes collude to limit the intensity of competition by making agreements to fix prices, to divide the market between them, to conduct boycotts or to rig bids for contracts?

.....

39. Have there been instances where competitors have engaged in mergers and acquisitions amongst themselves?

.....

40. Please complete the following Table below:

Competition Harm Index

Anti competitive harm	Weight (w) Assigned	Assigned Score
Vested interests	≤ 1	
Vertical integration	≤ 2	
Barriers to entry	≤ 3	
Un notified mergers	≤ 4	
Cartels	≤ 5	
Abuse of market power	≤ 5	
Total		

THANK YOU FOR YOUR RESPONSES

Appendix 3: Significance of Cross Tabulation on Variables

Significance from Cross Tabulations with Districts	Sig	X² Value	df
Age categorization	0.111	18.142	12
Level of education categorization	0.294**	22.3	8
Government facilitation categorization	0.000**	238.6	14
Government improvement in tea marketing	0.000**	72.811	16
Political leader altitude categorization	0.000**	62.429	8
Kickback	0.057*	9.185	4
Price determination categorization	0.000**	197.9	16
Price setting indicators	0.000**	186.1	8
Factors considered when selling green leaves Tea	0.000**	115.7	10

** Significance at 0.01
* Significance at 0.05