



VAASAN AMMATTIKORKEAKOULU
UNIVERSITY OF APPLIED SCIENCES

Stanley Tengey

Effectiveness of EU Standards and Certification on Cocoa Exports from Ghana

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Tämän opinnäytetyön tarkoitus on tutkia EU-standardien ja -sertifikaattien vaikutusta Ghanasta vietävään kaakaon. Tarkoitus on käsitellä kaakaon vientivajasta, joka voi johtua EU-standardeista ja -sertifikaateista.

Pareton periaate oli hyvin olennainen tässä tutkimuksessa muiden teorioiden ohella, joita on käsitelty yksityiskohtaisesti tutkimuksessa. Teoreettinen kokonaisuus sisältää selityksiä, pohdintaa ja määritelmiä. Tämä osa on tärkeä teorian ja artikkeleiden yhdistämisessä ja argumentin tukemisessa. Empiirisessä osassa on hyödynnetty määrällisen ja laadullisen metodien yhdistelmää kerätessä vastauksia kyselyillä ja henkilökohtaisilla haastatteluilla vastaajilta Ghanasta, Yhdistyneestä kuningaskunnasta, Tanskasta ja Alankomaista. Yhteensä 120 vastaajaa osallistui määrälliseen tutkimukseen ja yhteensä 6 avaintekijää Ghanan kaakaoteollisuudesta osallistui laadulliseen tutkimukseen. Määrällisen tutkimuksen analyysissä käytettiin SPSS-(tilasto)ohjelmaa, kun taas laadullisessa tutkimuksessa analysoitiin vastausten yhteisiä piirteitä. Tulokset näyttivät, että EU-standardit ja -sertifikaatit ovat erittäin merkityksellisiä hyödykkeen vientiketjussa, huomattava enemmistö osallistujista näkee näiden standardien ja sertifikaattien noudattamisen edellytyksenä Ghanan ja Euroopan unionin suhteiden vahvistamiselle. Faktasta, että EU-standardien ja -sertifikaattien kaakaopapujen viljelyn tiukkojen, mutta tärkeiden vaatimusten täyttämiseen liittyvät kulut tuottavat vaikeuksia köyhälle kaakaon viljelijälle, on kuitenkin ristiriitaisia tunteita.

Johtopäätöksenä on huomattu, että EU-standardit ja sertifikaatit vaikuttavat kaakaonvientiin Ghanasta EU:hun. Jos kaikki vientiketjun osapuolet toimisivat EU-standardien ja -sertifikaattien vaatimustenmukaisesti, hyödykkeen vientivajaus loppuisi. Lisää opinnäytetyön tuloksista kerrotaan tutkimuksen johtopäätöksissä.

ABSTRACT

Author	Stanley Tengey
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The aim of this thesis was to study the Effectiveness of EU Standards and Certifications on cocoa exports from Ghana. This thesis was carried with the intention to address the cocoa export deficits which may be attributed to EU Standards and Certifications.

Pareto's Principle was very relevant in this research together with the help of other theories which are well-detailed in the study. The theoretical framework includes explanations, reflections and definitions. This part is important in drawing the connection between theories and written articles to support the argument. The empirical part of the thesis, which is a mixed method of quantitative and qualitative research methods were used to gather answers from respondents from Ghana, the United Kingdom, Denmark and the Netherlands with the help of questionnaires and personal interviews. A total of 120 respondents participated in the quantitative research and a total of six key players in the cocoa industry in Ghana participated in the qualitative research. The SPSS (statistics) program was used to analyse the quantitative research data while the qualitative research was analysed by emphasizing on the commonalities of the respondents statements. The result showed that the EU Standards and Certifications are very relevant among members in the export chain of the commodity, a promising majority of the participants see compliance to EU standards and the certifications involved as a prerequisite to strengthening relationship between Ghana and the European Union. However, there are mixed feelings about the fact that EU Standards and Certifications do not impact the lives of the primary contributors but as a result make it difficult for the poor cocoa farmer due to the accompanied cost of meeting the strict but important requirements in cultivating the cocoa beans.

In conclusion, it is noticed that EU standards and certifications impact the export of cocoa from Ghana to the EU. Compliance by all parties in the export chain would see a close to the export deficit of the commodity. More about the result of the thesis is described in the conclusions of the study.

Keywords: Effectiveness, Standards, Compliance with, Exports, Certifications

TABLE OF CONTENTS

INTRODUCTION	1
1.1 Background Information of the Study	1
1.2 Research Problem and Objectives	2
1.3 Structure of the Study	2
THEORITICAL PART	3
1.4 Background information about Ghana.....	3
1.4.1 Population Breakdown.....	4
1.4.2 Society and Cultural Factors	4
1.4.3 Economical Outlook.....	6
1.4.4 Legislation and Politics – The Pillar of Standards.....	8
1.5 COCOA PRODUCTION IN BRIEF	8
1.5.1 Government Intervention	10
1.5.2 Importance of Cocoa Production	11
1.5.3 Inspection and Quality	11
1.5.4 International Cocoa Standards	12
1.5.5 Marking and Sealing Cocoa	13
1.6 STANDARDS, the definition and role in exports	15
1.6.1 EU Standards and Certification.....	16
1.6.2 Informal and Formal Standards.....	18
1.6.3 Examples of food related Standards.....	19
1.6.4 Role of Standards in Societal Development.....	20
1.7 Certification, the definition.....	21
1.7.1 Importance of Certification for Exports.....	23
1.8 Exportation, the definition	23
1.8.1 Causes of Exportation	24
REVIEW OF RELATED LITERATURE	26
1.9 Post Knowledge and Importance of Acquiring Skills from Exports by SME's	26
1.10 Challenges Facing the Agricultural Industry in Africa.....	26

1.11 Improving Market Access through Standards.....	27
1.12 The 80/20 Principle to achieve more with less effort	28
1.12.1 Why the 80/20 rule is so important.....	30
EMPIRICAL PART	35
1.13 Research Method	35
1.14 DATA, the definition.....	37
1.15 QUANTITATIVE RESEARCH.....	38
1.15.1 The Quantitative Research Design.....	40
1.15.2 The Statistical Analysis of the Quantitative Survey	42
1.15.3 Quantitative Research findings	42
1.16 DATA ANALYSIS: Qualitative research	49
DISCUSSION AND IMPLICATIONS	49
1.17 Participant’s Background Information.....	52
1.17.1 Participant 1	52
1.17.2 Participant 2	54
1.17.3 Participant 3	56
1.17.4 Participant 4	57
1.17.5 Participant 5	60
1.17.6 Participant 6	61
1.19 Involvement of EU Standards and Certification in Cocoa Exports	63
1.20 Involving all stakeholders to comply with EU Standards and Certification	65
CONCLUSIONS.....	67
1.21 Personal Reflections.....	70
1.22 Recommendation for further Study	71
REFERENCES.....	72
APPENDICES	1
QUANTITATIVE RESEARCH QUESTIONNAIRE FOR PARTICIPANTS.....	1
QUESTIONNAIRE ANSWERS	3

LIST OF FIGURES AND TABLES

Figure 1	Hofstede Dimension: Ghana	p. 5
Figure 2	The 80/20 Principle	p. 29
Figure 3	20 Products – 20% of total yield, 80% of profit	p. 31
Figure 4	When 1 product – 1% of the total makes 20% of the total profit	p. 32
Figure 5	The unusual 50/50 pattern – an uncertainty	p.33
Figure 6	Two modes of applying the 80/20 principle	p. 34
Chart 1	Ghana Export of cocoa and cocoa preparations	p. 8
Chart 2	Cocoa Export Variances	p. 10
Chart 3	Codex Alimentarius International Food Standards	p.19,20
Chart 4	Relevance of EU Standards in Cocoa Business	p. 43
Chart 5	Ease of Adopting EU Standards in working environment	p. 44
Chart 6	Respondent grouping: Age	p. 45
Chart 7	Familiarity to EU Standards: Respondents	p. 46
Chart 8	Familiarity Duration – in month	p. 47
Chart 9	Table of commonalities	p 63

LIST OF ABBREVIATIONS

<u>Abbreviation</u>	<u>Meaning</u>
ASTM	American Society for Testing Materials
CIA	Central Intelligence Agency
CEN	European Committee for Standardization
CENELEC	European Committee for Electrotechnical Standardization
COMTRADE	United Nations Commodity Trade
COCOBOD	Ghana Cocoa Board
FAO	Food and Agriculture Organization
FLO	Fair-trade Labeling
CSIR	Council for Scientific and Industrial Research
EFTA	European Free Trade Association
EU	European Union
EUR-Lex	EU legislation
EC	European Commission
GDP	Gross domestic product
HS Code	Harmonized Code
IBM	International Business Machines
ISO	International Organization for Standardization
KPI	Key Performance Index

PDCA	Plan, Do, Check, Act
ICCO	International Cocoa Organization
SPSS	Statistic Package for Social Science
SS	Sub-standard
UNCTAD	United Nations Conference on Trade and Development
US	United States
USD	United States Dollar
WHO	World Health Organization
WTO	World Trade Organization

INTRODUCTION

This chapter of the thesis introduces the reader to the background of the study, the structure of the study and the research problem. The main focus is to address the global cocoa export deficit by focusing on the effectiveness of the EU standards and certifications on cocoa exports from Ghana.

1.1 Background Information of the Study

A report in the 2015 annual publication by the International Cocoa Organization (ICCO), at the (UNCTAD) United Nations Conference on Trade and Development global commodities forum affirms that there are challenges affecting cocoa production globally. (ICCO 2015)

EU standards and certifications are a major concern when it comes to exporting produce or products into the European Union and the European Free Trade Associate nations. EU standards aim to encourage sustainable transactions among member states and all other trading partners as well as promote safety and restrict poor and harmful produce which may pose a danger on security or health. By the ISO 9000 (2015) definition of effectiveness – the degree to which planned effect is achieved. EU standards (planned activities) become effective if they are carried out, just as planned results are effective if the results are actually achieved.

Many of the exporting partners of the European Union have taken the advantage that comes with effecting these standards to promote foreign trade with the EU. The cocoa sector over the years has seen unsteadiness and this has drawn many investigations even though it could also be explored if standards whether voluntary or mandatory contributes to supply unsteadiness and eventually to deficits of the commodity. (ICCO 2015)

Export unsteadiness has created a wider gap in supply and demand. The EU has redefined its standard requirement for exportation of the commodity - EUR-Lex Act 2000/36/EC, and this is perceived by some stakeholders to have contributed to a five year continuous deficit from the year 2010 – to 2015. Other stakeholders

in the commodity trade also attribute the deficit through man-made causes such as deforestation and illegal mining of precious minerals on cocoa lands, financial misappropriation or even climate change. A report by the International Cocoa Organization ICCO (2015) predicts the trend to continue in future. The Cocoa Exporters Association in Ghana are of different views on the situation; some affirm that the standards commissioned by the European Union are quite unreasonable and limit the possibility to close the wider global cocoa deficit while a staggering number of the members are of the opposite view that the EU directives has rather contributed to positive results.

Cocoa, cocoa beans, commodity, cash crop and raw cocoa are used in different scenarios even though they define the same item as per the topic.

1.2 Research Problem and Objectives

The aim of this paper is to research the effectiveness of EU Standards and Certification for Cocoa Exports from Ghana; present the current situation of Cocoa Exports from Ghana to the EU and, analyze the results to determine the existing problems facing the Cocoa Industry in the Ghanaian perspective.

1.3 Structure of the Study

This study comprises of four sections, made up of introduction, theoretical study – including literature review, an empirical study and conclusions. The theoretical composition included explanations, methods, case reflections and theories shedding light on effectiveness, certifications, standards, cocoa, economic outlook of the case country. The theoretical study section includes the different forms of standards, reasons for exportation and other important literature pieces to support the argument. The empirical part of the research, which is a mixed method of quantitative and qualitative research methods gathered answers from respondents through a questionnaire and interviews. The empirical study also contains the results and analysis done based on the research. The conclusion is the last

section of the study and it has some thoughts about the general outcome of the study and some suggestions for further studies.

THEORITICAL STUDY

This chapter presents the theoretical part of the study. It expounds the focus “*Effectiveness of EU Standards and Certifications on cocoa exports from Ghana,*” by introducing the reader to the theories of the topic. The literature introduction explains exportation, standards, and cocoa, Ghana as a case country, and other relevant details to present why the research topic under study exists. It begins by guiding the reader through background information of Ghana – including societal and cultural factors; the economic outlook of Ghana; legislation and politics. After the first step, the reader is informed about the facts and data about the Ghanaian cocoa sector of which includes, the importance of the commodity, the relevant standards, preparation etc. It continues to usher the reader to understand standards by definition, its role in exports, the necessary EU standards and certification, by explaining the forms of standards and some food related standards. The reader also gets to understand the importance and relevance of certification and how it affects the exports of cocoa beans from Ghana. The empirical part of the research follows this chapter. It explains the methodology used to gather answers for the research problem.

1.4 Background information about Ghana

Republic of Ghana is a West African country; the nation borders Burkina Faso, Ivory Coast and Togo. The country was formally known as the Gold Coast due to the abundance of the resource. The country has suffered much in terms of colonization and brain-drain. 1957 is the year Ghana gained its independence from British colonization and became a star of hope on the West African sub-region and a beacon bearing the torch of Pan-Africanism. English is the official language of Ghana. Ten regions makes the country; Upper East, Upper West and Northern Region on the North; Ashanti, Brong Ahafo and Western Regions on the west; Volta and Eastern regions on the east and; Central and Greater Accra regions on

the southern part of Ghana. Ghana is a democratic republic governed by a four year renewable term presidency; and three arms of Government - the arms such as the Judiciary, Legislature and the Executive. The President is the highest office of Ghana by constitution of the republic. The 1992 Constitution and the cooperation of citizens and stakeholders has contributed in a continuous political stability and ensured peace in the Country. (CIA World Factbook 2015; World Bank 2016)

1.4.1 Population Breakdown

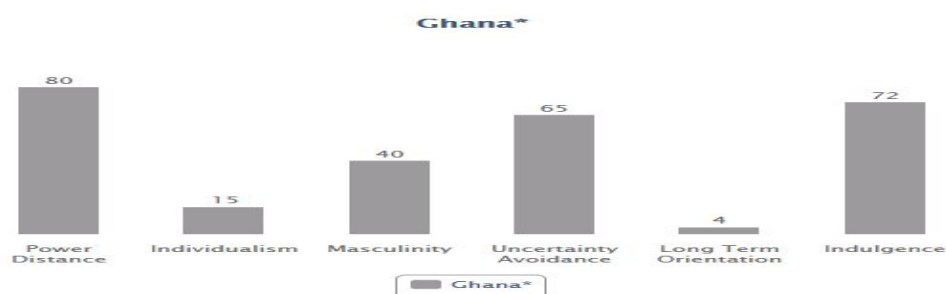
The demographic information about Ghana is relevant to this study because it projects the population size which indirectly establishes the understanding as to why cocoa production is very important in the Ghanaian society – how the loss of cocoa will affect lives through employment, society building or development and protection of agro-culture. According to World Bank (2016), the population stands at 28.21 million people. The dependency ratio (percentage of working age population in Ghana) as at 2015 was reported at 67.17%. On the other hand, the age group 55 years and above represents 8.98% of the total Ghanaian population whereas the age group 0-14 years represents 38.38% of the total population.

1.4.2 Society and Cultural Factors

The society of Ghana is such that a chief represents families of a clan; and every family has a head that represent their affairs to the public. Ghana has a very bureaucratic and hierarchical structure. Based on Hofstede's dimensions of culture, the country is measured based on factors such as power distance, masculinity, individualism, uncertainty avoidance, long-term orientation and indulgence. (Hofstede 2010)

Hofstede's six dimensions on culture is a result of an extensive research work carried out by Professor Geert Hofstede. It defines culture as a collective programming of the mind differentiating a group of people from the other. The research tool is used to measure the differences of one culture to another. Figure 2 below is the result of the six dimensions of the Ghanaian culture.

Figure 2: Hofstede Six Dimension of Ghanaian Culture



Source: geert-hofstede.com

Power Distance at 80: According to Hofstede (2010), power distance is related to the various solutions to the basic problem of human inequality. Power Distance is relatively high in Ghana. The country scores 80 - meaning everyone has a boss or a superior and this sequence must be followed. Persons are treated differently based on their status, class or level. It is very important to include this cultural dimension in the discussion since it would help us understand its role in compliance with EU standards by the average Ghanaian contributor to cocoa exportation to the European Union.

Individualism: Individualism under the Hofstede's dimension of culture is defined the degree at which society maintains interdependence among members. Ghana scores 15, which means it is a very collective society. The commitment of a member to a family is on a long-term basis. Every member is to lookout for the other in terms of sustainability, development and growth. This cultural dimension is relevant to the topic to match up how individualism or collectivism affects compliance with standards. (Hofstede 2010)

Uncertainty Avoidance: Hofstede (2010) relate uncertainty avoidance to the level of stress in a society in the face of an unknown future. Ghana scores 65 in terms of avoiding uncertainty. This measure is about preparations towards future surprises. It could be related that, Ghana maintains rigid but strict rules and regulations to avoid uncertainties. This cultural dimension is chosen because it directs us

to understand the relevancy of EU standards and certification to the cocoa sector and if the score is justifiable as per the Hofstede cultural dimensions.

Long Term Orientation: Ghana scores as low as 4 in terms of Long Term Orientation. The interest for quick solutions to a problem is significant than dealing with the problem permanently. Compared to their western counterparts, adequate preparation for future shortcomings is very low and, therefore, prolongs the possibility of eradicating challenges should they occur. This dimension is to find out if there are measures put in place to ensure that members comply with the necessary EU standards and as to if it can be continued in the long-term especially when the country scores as low as 4 in terms of Long-term orientation.

Indulgence: The country scores 72 in this category of the dimensions. Ghanaians are not restraint but rather more indulging people, optimistic and possess positive attitude. Community plays an important role in Ghana; formation of group is common just as respect to elders and family. The openness of society encourages persons in this society to engage in communal activities and indulge in social gatherings. This cultural dimension is to engage the discussion to find the relevance of indulgence in compliance with EU standards and certifications on cocoa exports from Ghana.

1.4.3 Economical Outlook

Definition from Investopedia explains economy to be large set of inter-connected activities which helps in determining how scarce resources are allocated. This means, economy encompasses all activities that are related to the production, trade and consumption of services and goods in an area. (Investopedia 2017)

According to CIA World Factbook (2015), the Ghanaian economy gained strength by a quarter century of competitive business atmosphere, continual sound management, and sustainable reductions in poverty levels. In early 2012, Ghana has suffered the consequences of high budget, current account deficits and loose fiscal policy, depreciating of the Ghanaian Cedi is also a consequence of the challenges.

Although Ghana is blessed with natural resources, its market-oriented economy is with relatively porous policy barriers when it comes to trade and investment in comparison with other neighboring nations. (CIA World Factbook 2015)

Impact of Agriculture contributes closely to 25% of GDP, employing more than 50% of the working class, mainly small landowners. The services sector accounts for about 50% of GDP. The major contributors to foreign exchange are gold, cocoa exports and individual remittances. The expansion of the Ghanaian amateur oil industry has plummeted economic growth, although the recent oil price crash has reduced by 50% Ghana's 2015 anticipated oil revenue. Oil production at Jubilee, the nation's offshore oil field, commenced in the middle of December 2010 and currently produces averagely 110,000 barrels per day. The country's premier gas processing plant located at Atuabo in the Western Region is a production site for natural gas taken from the Jubilee Field to provide power to several of the nation's thermal power plants. (CIA World Factbook 2015)

In the year 2015, the biggest single economic challenge the nation experienced was as a result of the lack of consistent electricity. To address a growing economic crisis, Ghana in April 2015 signed a \$920 million extended credit facility with the International Monetary Fund. (CIA World Factbook 2015)

The target of 5.3% of GDP in 2016 to narrow it down was missed leaving a wide deficit of 9% of GDP. The GDP growth of the year 2016 reached 3.6% of the initial target of 3.3% while the inflation which was at 17% saw a decline to 15.4% in December and further to 13.3% in January 2017, near to the central bank's target of the ranges 6%-10%. The oil sector is to increase in production when the TEN Field reaches its full capacity. Survey conducted by the central bank indicates a positive outlook for business sentiments. (World Bank 2017)

Commodities Exported from Ghana

Tuna, bauxite, timber, gold, oil, cocoa, aluminum, manganese ore, horticultural products, diamonds are the commodities exported from Ghana. Cocoa is predomi-

nantly the cash crop of the country and as a matter of fact the focus commodity for this study.

Exports of Cocoa and Cocoa Preparations

According to United Nations COMTRADE database on foreign trade, Ghana exports of cocoa and cocoa preparations as at 2013 recorded USD 1.46 Billion as recorded in Chart 1 below.

Chart 1: Ghana Export of Cocoa and Cocoa Preparations



Source: comtrade|tradingeconomics.com

1.4.4 Legislation and Politics – The Pillar of Standards

Certifications and standards’ relevance is when the legislative environment is favorable. Legislation stands as the foundation on which all policies are built. Ghana is known to be a unitary state with a unicameral legislative system. By the powers of the 1992 constitution, Ghana has one parliament which expresses all primary and mandatory legislative functions. Ghana’s commitment to legislative procedure; the rule of law and all other common laws creates a firm foundation for institutions to thrive.

1.5 COCOA PRODUCTION IN BRIEF

The name Cocoa originates from a Latin term “Theobroma” which in translation means -foods of the gods. Cocoa also referred to as Cacao is a tropical American evergreen tree that produces seeds; the seeds are contained in large oval pods

which grow on the trunk. Today, the highest cultivation of the tree is from West Africa. (Pinnamang-Tutu & Armah 2011)

History explains that the crop played important role in many of the ancient South American cultures. In the early centuries, the Mayans used the beans to create beverages which were used for ritual purposes; shared during marriage and betrothal celebrations. Cocoa is the major agricultural export of the Republic of Ghana. Ghana is the second largest cocoa exporter in the world behind Ivory Coast. Cocoa was introduced in Ghana in 1870 by an agriculturalist called Tetteh Quarshie after his return from Fernando Po – an island known today as Bioko in Equatorial Guinea. From the day of introduction to this day, the crop has served as the leading agricultural export for the nation. (Pinnamang-Tutu & Armah 2011)

The cultivation and production of the cash crop occurs mainly in the country's forested locations such as Brong-Ahafo Region, Ashanti region, Central Region, Eastern Region, Volta and Western Region; areas where rainfall is 1000 to 1500 millimeters per fiscal year. In Ghana, the crop year commences in October. All cocoa except smuggled ones are sold at fixed prices to the Cocoa Marketing Board of Ghana (COCOBOD). The production of these precious beans is mostly carried out by peasant farmers on small farms ranging from 1-3 hectares plot of land. (Pinnamang-Tutu & Armah 2011)

In the year 1984, the board received further institutional reformation with the aim of subjecting cocoa sector to market forces. To further the cause, the government shifted crop transport responsibility to the private sector; removed subsidies for production inputs such as insecticides, fungicides, fertilizers and equipment and; there was a measure of privatization of the processing sector through a joint venture. Akuafu Check Payment system was introduced in 1982 at the point of purchase of dried beans. Under the payment system, a farmer receives check signed by the treasurer and produce clerk. (Pinnamang-Tutu & Armah 2011)

Plantation diversity proceeded gradually with a minimum between seven to fifty-two plantations sold by the end of 1990. In the 60's Ghana was leading in cocoa

production but this stopped in the early 80's – a drop in an average supply of 450,000 tons per fiscal year to 159,000 tons in 1983 and 1984. This was attributed to widespread diseases, aging trees, bad weather and low producer prices. (Pinnamang-Tutu & Armah 2011)

The report below (Chart 2) from tradingeconomics.com shows the variances of cocoa exports from Ghana between 2012 to first quarter of 2017 in USD millions.

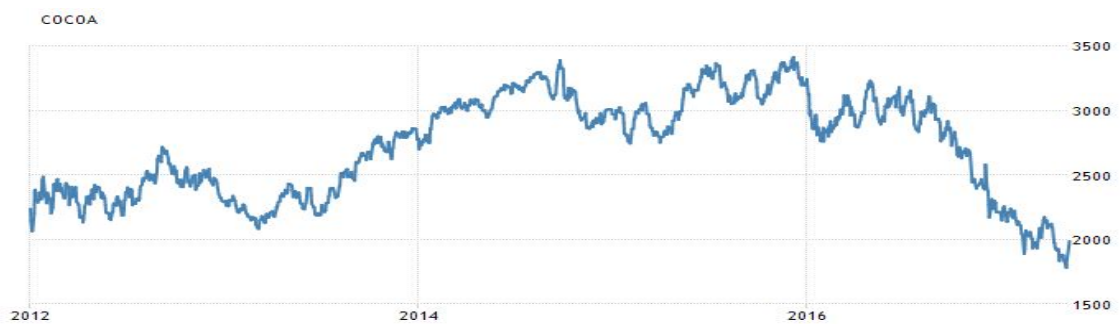


Chart 2: Cocoa Export Variances **Source:** www.tradingeconomics.com|otc

1.5.1 Government Intervention

According to Pinnamang-Tutu & Armah (2011), Ghana like many other African countries and its developing counterparts, government intervenes in the export chain of agricultural products. Public agencies are sanctioned by law to be the single buyers of agricultural export products. Due to this, prices can be strongly influence by the buyer (in this regard, the government). By the powers invested in them, they are able to purchase cash crops at determined domestic administrative prices for exports. Standards bridge the gap between poor performance and economic freedom; foster trust and loyalty among employees and employers, farmers and buyers, businesses and governments, importers and exporters.

1.5.2 Importance of Cocoa Production

Cocoa production has served as a source of employment, especially to the rural populace and a traditional medium of livelihood. In the past – between the years 1890-1930, everything one wish to do could be done with Cocoa.

If one is to marry, he needs to sell cocoa.

To go to school, you need to sell cocoa.

To buy a land, you need to sell cocoa.

To build a house, you need to sell cocoa.

To be successful in politics, you need to sell cocoa.

To sustain and manage the home, you need to sell cocoa.

To be very successful and famous, you need to sell cocoa.

It goes far to the extent of cocoa plantation being the ultimate property willed to one generation by the other. To the national economy, cocoa cultivation, production and exportation contributes to the gross domestic product of the country and serves as a source of employment to thousands of youth – the World Bank collection of development indicated that, as in 2012 the industry employed 0.669% of youth into agriculture. (Pinnamang-Tutu & Armah 2011; World Bank 2012)

1.5.3 Inspection and Quality

The word quality may be used in different areas. In a narrow perspective, it covers the flavour and how to maintain it, but in the broad perspective, it covers other added value which will make the beans more acceptable. These various areas of quality can be placed in two divisions. The foremost are the qualities which ensure acceptability of the beans by the manufacturer. These include flavour, grade and purity, which embrace items covered by food regulations and grading standards, and the firmness of cocoa beans. The second category considers the physi-

cal characteristics which affect the yield of edible content which the manufacturer can obtain from a particular parcel. Taking together the two categories affect the value of a parcel compared to other cocoa beans. (Pinnamang-Tutu & Armah 2011)

1.5.4 International Cocoa Standards

Cocoa standards serve as a benchmark for cocoa farmers and exporters. The EU Standards is developed upon the principles of the international cocoa standards. The beans are graded on the basis of the count of defective beans in a cut test. According to Pinnamang-Tutu & Armah (2011), grading cocoa beans are necessary in the packing and bagging process before the beans is exported from the country to the buyer. Based on the count, defective cocoa beans should not exceed the following limits in these respective grades:

Cocoa Grade 1

- Mouldy beans: defects should not exceed three per cent per count
- Slate beans: defects should not exceed three percent per count
- Germinated, flat beans or insect damaged beans should not exceed three per cent per count.

Cocoa Grade 2

- Mouldy beans: defects should not be more than four per cent per count
- Slate beans: defects should not be more than eight per cent per count
- Germinated, flat beans or insect damaged beans should not exceed six per cent per count. (Pinnamang-Tutu & Armah 2011)

As a guide the cocoa must be uniform in size. This means that, at most twelve percent of the beans should be outside the range of minus or plus a third of the average weight. Any batch of the sampling which does not meet the Grade 2 standard is categorized as sub-standard (SS) and is thereby marketed under special contracts. (Pinnamang-Tutu & Armah 2011)

1.5.5 Marking and Sealing Cocoa

- The graded cocoa must be bagged and officially sealed. The bag or seal should spell the following content: Grade or “SS” if sub-standard, producing country, and whether mid-crop or light, and other significant identification marks in accordance with mandatory national practices.
- Validity period of the cocoa should be determined by governments with concern to climatic and storage conditions. (Pinnamang-Tutu & Armah 2011)

Inspection of cocoa beans

- Cocoa is to be examined in lots not more than 35 tons by weight
- Every cocoa parcel is to be grade-marked by an inspector after determined the grade of the cocoa on the basis of cut test (explained in subsequent paragraph).

Sampling cocoa beans

- 1) It is mandated to obtain samples for inspection and analysis form:
 - a) Bulk cocoa beans, by taking samples at random as they enter a hopper from above, bottom and middle of the beans using a dust-free surface, after the beans have been thoroughly mixed.
 - b) Samples of cocoa in bags should be done by taking the samples randomly from bottom, top and middle of sound bags using suitable stab sampler to enter closed bags through the meshes of the bag, unclosed bags should be entered from above.
- 2) Sample quantities to be taken should be at the rate of at least three hundred beans for every ton of cocoa.
- 3) Samples of bagged cocoa should be taken for not less than thirty percent of the bags – one of every three bags.
- 4) Cocoa to be exported in bulk should be such that five samples are taken from every ton of cocoa.

- 5) Samples to be inspected from importing countries should be thirty percent of each lot of two hundred tonnes. The sampling should be at random from bottom, middle and top of the bag. (Pinnamang-Tutu & Armah 2011)

The Cut Test of Cocoa

- Cocoa samples are to be thoroughly mixed and then shuffled to leave a pile of slightly 300 cocoa beans. The first 300 cocoa beans should then be counted off irrespective of shape, size and condition.
- Defective beans are to be counted differently – defects include insect damaged, mouldy, flat or germinated.
- Examination is to be carried out in sound daylight or its artificial equivalence and the result of each kind of defect is to be expressed as a percentage of three hundred examined beans. (Pinnamang-Tutu & Armah 2011)

Bagging Cocoa

Cocoa is a sensitive commodity and therefore bags for it should be sound, clean and sufficiently strong and properly sewn. Cocoa beans are to be shipped only in new bags.

Storage of Cocoa

- Cocoa beans is to be stored in premises constructed and operated with the object of keeping the moisture content of the beans sufficiently low, consistent with local conditions. The store is to be on decking or grating which allow at least 7 cm of air space above the floor.
- Strict measures are to be taken to prevent infestation by rodents, insects and other pests.
- The bagged cocoa should be stacked so that:
 - i) Each grade of cocoa and shipper's mark is separately kept by clear passages not least than 60 cm in width, similar to the passage which must be left between the bags; and each wall of the building.

- ii) Disinfestations by fumigation or/and the careful use of acceptable insecticide sprays such as those based on pyrethrin, may be carried out where the need arise.
- The moisture content of each lot should be checked periodically during storage and immediately before shipment. (Pinnamang-Tutu & Armah 2011)

Standards, how it prevents infestation of Cocoa

Cocoa beans are likely to be contaminated by insects which have not penetrated the beans and whose presence was not exposed by the cut test – a test deployed for grading purpose. It is likely that such insects may subsequently contaminate the beans and cross infestation of other shipments. For this reason, the shipment should be rechecked for infestation of major insects. Should it be found infested, it should be fumigated to kill all insects to avoid damages to the cocoa beans. In cases where the use of fumigants or insecticides serves necessary to control infestation of cocoa beans, there should be proper application procedure to avoid any risk of tainting or addition of toxic to the cocoa beans. Any of such toxic residues tainting the cocoa in the process is not to exceed the tolerance limit stipulated by the FAO/WHO Codex Committee on Pesticide Residue and FAO/WHO Expert Committee on Pesticide Residue; and by the importing nation's government. Cocoa stores should be built in a condition to deter rodents. In such cases where rodents are to be controlled or prevented, it should be done properly to avoid poisons and other toxic residues from the cocoa beans. Any possibility of damaging the beans with substances which are poisonous is to be prevented.

1.6 STANDARDS, the definition and role in exports

The word standard seems to be common when businesses evaluate a result; teachers and lecturers plan to enrol new students; regulators intend or are deciding a new policy; consumers glance through shelves to spend the last penny on a product; and exporters compare a commodity from one supplier to the other. The term

has been used widely by institutions, consumers, services, manufacturers and academia.

International Organization of Standards define standard as a document that provides specification, requirements, characteristics or guidelines which can be used consistently to ensure that processes, materials, services and products are fit for their intended purpose. (ISO 2015)

The European Union Standard is defined as a document that spells out requirements for specific material, item, component, service or system or; spells out in details a particular procedure or method.

In the European Union perspective, the formal definition focuses on a document which is established by consensus, approved by a reputable body that provides for common and repeated use, guidelines, rules or characteristics for activities, which aim at achieving to the highest degree of order in a given context. (CEN CENELEC 2017)

1.6.1 EU Standards and Certification

The term EU Standards and Certification in simple terms is referred to as the set of principles, procedures, line of action, modus operandi one has to go through to achieve a specified benchmark set by the European Committee for Standardization (CEN CENELEC). The standards are backed by certificates – legal document proving that a stage has been accomplished; conditions have been met; tests have been passed and approved; items or lists have been cleared for processing, to be imported or exported.

These standards and certifications become significant in the sequence of transactions between companies, businesses or entities; bilateral or multilateral trades among EFTA (European Free Trade Association) member nations or EU member state and a Non-EU nation(s). The need for an EFTA/EU member nation to adhere or comply with the set standards is to ensure swift but safe transaction between that EU member nation and the bilateral or multilateral partner. Compliance to the

set standards prevents strict or harsh penalties in the form of fines, exorbitant levies or taxes, duties, sanctions or in some circumstances court actions to be suffered by the host nation or/and the bilateral or multilateral partner, whether a company, firm, organization or an entity of the state. (CEN CENELEC 2017)

In foreign trade, it is prudent that standards are understood by all parties especially when there is a mutual interest or interests since it encompasses production, processing, packaging, shipping, sales and delivery. The entire supply chain from the non-EU partner to the EFTA/EU partner requires compliance to set standards and certification required of them, first by the European Committee for Standardization before any other standards and certification required by the involved entities. (CEN CENELEC 2017; ISO 2011, 11-18).

According to European Standards (CEN), for example a product bearing the CE marking which is from the French word "Conformité Européene" is to state that the product conforms to the essential requirements of the:

1. Relevant European safety, health and environmental protection, legislation requirements by the European Committee for Standardization.
2. That the product may be legally placed on the market of/in the EFTA/EU nation.
3. Product can be moved freely within the EFTA and EU single market.
4. Permits also the withdrawal of the non-conforming products pass EFTA enforcement, customs and excise authorities.

Whether a supplier, freight forwarder, export management company, export packers, customs, brokers, compliance to the laid down standards and the certifications to back them is a prerequisite so long as the transaction involves an EU country, multilateral or bilateral partnership among EFTA and EU member states. (CEN CENELEC 2017)

Management systems which meet international standards is an automatic control system for ongoing planning, executing, monitoring, measuring and evaluating continual progress of business operations. (Pilot & Jayne 2014)

Pilot & Jayne (2014) believes that integration of standards into any operation, management or project requires a PDCA (Plan, Do, Check, Act) cycle. By focusing on continual improvement, three simple steps can be applied as follows:

- **Step One: *Identify*** the process, the risks involved, planning of objectives and strategic measurable plan for each cycle or process, and resources and the requirements tied to the process.
- **Step Two: *Insure*** the provision of support system such as documentation, training, communication for operational control of the business processes, resources.
- **Step Three: *Improve*** by looking at the monitoring, analysis, measuring and valuation – non-conformance, audits, corrective action, and management reviews of each process.

1.6.2 Informal and Formal Standards

Standards can be grouped into two types. The classification or grouping can be defined by the formation of the standard and the authenticating bodies. Standards are formed and published through various degree of consensus and approval of credible organizations and bodies. **Formal standards** are the type of standards which are formed, adopted or approved by national, regional or international bodies example of such bodies is Ghana Standard Board. **Informal Standards** on the other hand are standards which are developed and published by other standard organizations which are well know or highly respected examples include the IEEE (Institute of Electrical and Electronic Engineers), FLO (Fair-trade Labelling Organization) and ASTM (American Society for Testing Materials). Formal standards are built using the infrastructure of national standard boards. Aside the two known types, companies also publish **private standards** for internal usage.

1.6.3 Examples of food related Standards

The Food Code or Codex Alimentarius is a set of principles and guidelines established in 1963 by the World Health Organization and Food Aid Organization to develop and harness international food standards, with the aim of protecting consumer health and international food practices.

The code concerns safe and quality food for everyone. 99% of the world's population are so far members. Ghana and many developing countries have signed to the practice. Membership encourages countries to compete in sophisticated world markets and also improve food quality and safety for the population. Although membership is voluntary, Codex standards have over the years served as the basis for national legislations. The standards are based on best available science backed by independent international risk assessment bodies or ad-hoc consultations organized or partly funded by the WHO and FAO.

So far, Codex has a list of 346 entries which comprises guidelines and principles; code of practice and standards. Among the listed are the ones shown in chart 3:

Chart 3: Codex Alimentarius International Food Standards

REFERENCE	STANDARD/GUIDELINE	COMMITTEE	YEAR
CAC/RCP 72-2013	Code of Practice for the Prevention and Reduction of Ochratoxin A Contamination in Cocoa	Codex Committee on Contaminants in Food (CCCF)	2013

CAC/GL 82-2013	Principles and Guidelines for National Food Control Systems	Committee on Food Import and Export Certification and Inspection (CCFICS)	2013
CAC/GL 83-2013	Principles for the Use of Sampling and Testing in International Food Trade	Committee on Methods of Analysis and Sampling (CCMAS)	2015
CAC/GL 38-2001	Guidelines for Design, Production, Issuance and Use of Generic Official Certificates	CCFICS	2009

Source: FAO | Codex Alimentarius 2016

1.6.4 Role of Standards in Societal Development

Opting for standard as mentioned above is voluntary though it also serves as a basis for national legislations. Consensus or voluntary based standards has played various significant roles in modern economies and international trade. (Breitenberg 2009)

The fact that standards provide acceptable ways for measuring, describing, naming, managing, reporting, testing and specifying makes it worth abiding by businesses, institutions, governments and consumers. Standards provide:

- A recognized means for assuring safety, quality, reliability and interoperability of services, processes and products;
- Basic support for markets, commercialization and market development;

- A technical ground for procurement and;
- Technical support for appropriate policies and regulations.

Again, standards can lead to various cost reductions and maximization of profits when best practiced by economic players. It is not mistake to say that without standards, a definition for quality will seem impossible since both terms correlate – one cannot be defined without the practice of the other (Breitenberg 2009, 22-24).

Pilot & Jayne (2014) assert that international standards provide a framework for management systems, to aid leaders in driving business success. They make possible continual improvement in business operations, providing a framework for performance, productivity and/or profits. Guasch, Racine & Sanchez (2007) argues that, standards establish a common technical language for the comparison of physical attributes and the conveyance of descriptive technical information as well as defining common characteristics of two or more entities – therefore providing a way of interchangeability and generate economies learning in productivity or economies of scale. Safety and minimum standards on the other hand allows consumers to access the safety of product before initiating purchase. Innovative efficiency and productivity are among the common economic benefits of standards in the sense that, variety-reducing standards lead to economies of learning or economies of scale by allowing suppliers to achieve lower per-unit costs when they produce large homogenous batches.

1.7 Certification, the definition

Certification and standards relates to each other in many contexts. The term if taken out of the equation creates a vacuum which cannot be filled. Business dictionary defines certification as a formal procedure by which an authorized or accredited person or agency assesses and verifies (by attesting in writing through issuance of a certificate) the characteristics, attributes, quality, status or qualification of individuals or organizations, goods or services, processes or procedures, situations or events in accordance with instituted conditions or standards. In sim-

ple terms certification is referred to as a broad range of acts of government officials – could be from high ranking to/or low ranking officials.

According to Hale (2011) some certifications are considered after an event such as lawsuit or even the loss of a major customer. In other cases considerations are made to prevent disputes and also gain competitive advantage over another - examples like export competitors, distributors, the market as a whole. Many of the certification programs are as a response to external pressure for exporters to let their people perform to standard (in other words guided procedure). Certifications were developed by certifying boards and professional societies to protect the sanity, health and welfare of the public. These still remains the driver for many professional societies, the likes as credentials offered by Board of Certified Safety Professionals, Ghana Standards Board, Ghana Foods and Drugs Authority, and the European Union.

Hale (2011) argues further that, in addition to protecting the masses, professional societies develop certification to attract members, to enable the certified to be competitive in the industry, to promote participation in their educational programs, to counter regulatory pressure for licensure that may prevent or restrict practice, and to drive universal standards. Even then, some certifications are created just because there is a demand for them - there are enough people who seek that it become profitable for an organization to offer it. Economics is indeed the driver for many certifications.

Corporations including exporters' rationale for credentialing are different from that of professional bodies. In many instances, corporations implement certification to demonstrate due diligence to those with stakes in them, to promote continuous improvement, to maintain skills and knowledge, and to increase performance or productivity. To turn away from unnecessary costs, more organizations, firms of which exporters are turning to certification programs as a way to help them compete and retain competence in their areas of operation; establish uniform performance standards which will give them the enablement to work with farm-

ers; rapidly deploy contractors and third-party providers; raise a level of root competencies across the organization and supply chain; to apply multi-disciplinary approach of solving complicated challenges; to adequately integrate processes, products and supply chains so as to comply with local and international regulations. (Hale 2011)

1.7.1 Importance of Certification for Exports

Hale (2011) asserts that certification is a prerequisite for many reasons in the field of business, academics, health, security and government. In export activities certification is significant for:

- Prove of legitimacy in transacting a task; ownership of a consignment; permission to move goods or right to beneficiary.
- Promoting mutual respect and trust between the exporter and importer
- Acceptability of consignment by the importer
- Basis for drafting contracts and other export obligations

It is a requirement for exporters to provide all supporting certificates and documents to the importing partner to facilitate clearance from customs and vice versa.

1.8 Exportation, the definition

Exportation is a function of foreign trade whereby goods or produce of one country are shipped to another for future trade. (Investopedia 2016) The receiving country becomes the Importer and the shipping country referred as the Exporter. In commerce export is defined as goods (visible exports) or services (invisible exports) sold to foreign nations. (Meridian Dictionary 2016)

Johnson (2010) urges that it is important for the exporting company to know the laws and regulations of the importing country which might affect the transaction. Improper information could lead to prohibition of importation of the exporter's product or in some cases making it impossible for resale of the product. In this context it is a prerequisite for the exporting partner to understand the standards

that surrounds exportation of the cocoa beans from Ghana to the European Union or European Free Trade Associate (EU/EFTA).

1.8.1 Causes of Exportation

There are numerous reasons why countries would export products or services but the most common of these reasons are: (WTO 2013)

- **Overproduction:** When firms produce more than they can sell in their home country, it causes the need to explore new markets and this fulfillment result in export of the overproduced product to the asking country. Same can be said about most African countries endowed with cash crops such as cocoa, coffee, cotton and the likes. Overproduction leaves manufacturers, exporters, organizations, corporations no choice but to look for markets outside so as to reduce fixed and operational costs, break even or if possible maximize profits. Inability to sell the produce can lead to drop in revenue, bankruptcy, unemployment which indirectly has more negative impact on the economy of the country where the produce originates – in the case of Ghana where cocoa is the cash crop, high inflation and poor GDP growth. However a exporting less than importing too can leave negative trade balances.
- **Higher Prices:** Business thrive when there is profit and when that profit cannot be gained in the host country, but the foreign market is willing to pay more for the same product or services, it creates a reasonable urgency to export to those markets for a higher price. This enables firms to be competitively advantaged in the host country in the face of strife competition as well as maximize profits and meet their economic and financial obligations.
- **A Necessity:** In many developing countries such as Ghana and Ivory Coast, cocoa is produced over the capacity of the population. This means that, what is produced cannot be consumed by the entire population and for this reason it is necessary to export to demanding markets in Europe,

Americas and Asia. The need for supplies by associated parties in the produce-to-product chain also plays significant role in exports. In cases where the export is a cash crop and very crucial for the survival of pharmaceutical companies, confectionary companies and the likes, it becomes a necessity to supply since one firm indirectly depends on the other.

- **Foreign Currency:** Exports enable the exporting country to earn foreign currency to cater for other foreign concerns or products. Earning foreign currencies can help the country import products which are or cannot be manufactured, grown or mined in the country. The same can be said that foreign currency if swapped effectively through exports enables the exporting country to control inflation, deflation and foreign exchange risks.
- **Interconnectivity:** Companionship is important, it promotes trust, loyalty, commitment, security and equality. Exporting enable countries to connect to each other's market and develop an infrastructure to address political and economic issues through policies, agreements or consensus. The need to interconnect is a prerequisite in foreign trade, not to argue that breaking through another's boundary with a produce, product and its relations requires entry permission – from the entering country vice versa. Commitment in export is when the exporter meets his socioeconomic obligation to the state, to the importer and authorities; by abiding to export rules and regulations and all financial obligations such as fees, fines, taxes, surcharges and payment of goods and services. (WTO 2013)

The need to export differs from one country to another based on the above reasons which may be internal or external causes, however it is not mandatory to export when other measures to control internal markets seem beneficial. (Eliasson, Hansson & Lindvert 2012)

Factors such as Gross Domestic Product (GDP), inflation and deflation are economic concerns affect exports of goods and services from one country to the other. Effective standards and certifications serve as a means to combat these inefficiencies.

REVIEW OF RELATED LITERATURE

The literature review aims to describe the main theoretical approaches briefly based on academic sources found, as well as compare and analyzes different aspects based on the research topic in question.

1.9 Post Knowledge and Importance of Acquiring Skills from Exports by SME's

Eliasson, Hansson et al (2012) emphasize the post-knowledge and importance of acquiring skills from exports by small scale enterprises. The literature summarizes the impact of knowledge through practice. The literature question "Do firms learn by exporting or learn to export?" creates the vacuum to research for answers. In the case of the cocoa sector in Ghana it necessary to find out how the EU standards and certifications has impacted the export cycle – how the directives have impacted upon the beneficiaries, contributors and stakeholders either directly or indirectly.

1.10 Challenges Facing the Agricultural Industry in Africa

Bates (2014) addresses the challenges facing the agricultural industry in Africa with emphasis on cocoa exports from Ghana, though other cash crops from the region was mentioned, the focus of this paper is to investigate the relation of the problem relatively to EU Standards and Certifications cocoa exports must meet. It also mentions the political basis of agricultural policies. As per the Food and Agricultural Organization (FAO), during the 1970s the volume of export of food commodities from Africa declined; from groundnuts in Senegal to palm oil in Nigeria, cocoa in Ghana and cotton in Uganda. The article stressed on a political problem facing the agricultural industry on the continent.

Improper Incentives for farmers can be said for almost all the contributory nations. This is the basic origin of problems in the farming sector, the action lies in those who distort the operations of the market. One of such distortions includes policies adopted by governments. Policies which do not confound with the operation in the sector undercut the productivity potential of the farming population. A

major source of the blunder of third world agriculture is bad policy. (Schultz 1978)

As per Bates (2014), conceptualization of the agrarian producer suggested a new definition of agricultural policy. The suggestions that agricultural policies consists of governmental policies or actions that affect the earnings of rural producers by influencing the prices the producers confront in the major markets which determine their income. In many African nations, government intervenes into the market for agricultural commodities; markets for input into farming and; the markets for the goods farmers buy from the urban-industrial sector. It is undeniable that throughout the political actions is purposeful behaviour of which among them is the government pursuit of social objectives and the resources to achieve those objectives. Foremost of the social objectives of governments in developing nations is to divert the basis of their economies from the cultivation of agricultural commodities and toward the production of manufactured goods. This objective strongly drives their choice of agricultural policies. Just as other governments in developing countries, governments of African nations intend to transform their economies from agricultural to industry, therefore setting prices in markets just to capture agro resources. The commitment to development leaves governments to intervene in the agricultural sector and extract resources needed to build a modern economy.

1.11 Improving Market Access through Standards

Stern (2003) elaborates on improving market access through standards by using Kenya as a case country. The article covers the significance and importance of Standards in business development and market entry. The theory is helpful to analyse the theoretical part of this thesis. The paper mentions that standards when used strategically can enhance the competitive position of countries. In countries where agricultural is a leading contributor of national GDP, it is essential to have standards to control the production, distribution and export of agricultural products – a proper international trade procedure. The author compares Kenya, a coun-

try whose economy relies more on agricultural commodities and its related products. The research urges that, integration of different organizations as a foundation is a necessary and not an option should Africa aims of achieving a single large market on the continent. In view of Kenya, standards are implemented through trade policies, mainly the ministry of trade and industry implements the trade policy. Formulation of the trade policy is the responsibility of several ministries (Ministry of Trade and Industry, Office of the President, Ministry of Finance and Planning, Ministry of Agricultural and Rural Development, Ministry of Foreign Affairs), which constitutes the Cabinet's economic subcommittee and the central bank. Being a founding member of the World Trade Organization (WTO) since 1995 encouraged participation in the multilateral trading system, although Kenya also practices preferential trading system as a means to increasing cash flows.

Aside the above literature reviews, other materials and academic pieces will be considered for a successful and valid result.

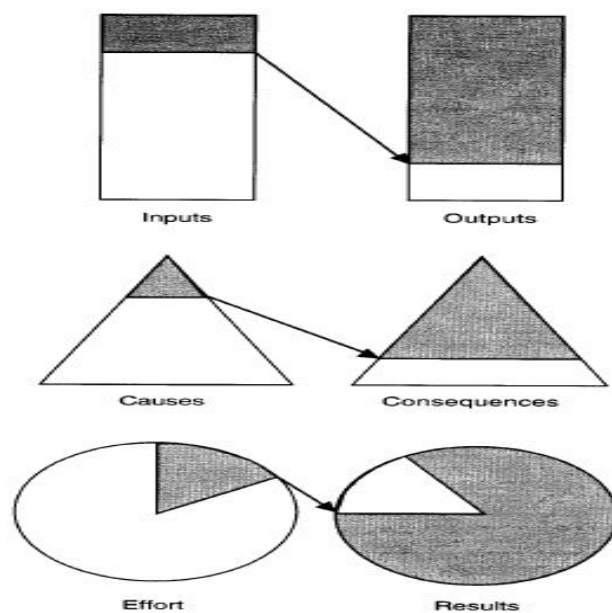
1.12 The 80/20 Principle to achieve more with less effort

Koch (1998) discusses the Pareto Principle discovered in the year 1897 by an Italian economist called Vilfredo Pareto. This discovery has over the years been called names such as the Principle of least effort, the Pareto Law, the 80/20 rule, the Principle of imbalance or simply the Pareto Principle. In many ways the 80/20 rule has been able to shape modern world from the field of business, information technology, governance or human resource management and academia. Among the beneficiaries include economists, business managers, marketers, sales executives, quality controllers, exporters, and project managers. Even though this principle was discovered many years ago, it has remained to be one of the greatest secrets of our time. The few who know the principle hardly exploit the full potential of it.

The principle came into the limelight when Vilfredo Pareto happened to be looking for the patterns of income and wealth in the nineteenth-century England. He discovered that most of the wealth and income ended up to the minority of the

people in his samples. He also discovered two other evidences which he deemed very significant. One of it being that there was a consistency in arithmetical relationship between the distributions of people – a percentage of the total relevant population; and the level of wealth or income they enjoyed. In simple facts, 20 percent of the population enjoyed 80 percent of the wealth. His other finding was that this repetition of imbalance in the distribution of income and wealth was traceable whenever he looked at data of different time periods or different countries. The consistency of the pattern did not matter whether he looked at whatever data was available years before, present or from other countries. The patterns never changed but kept repeating over and over again with mathematical accuracy. Koch (1998) argues further that, the principle after its discovery did not get the necessary attention needed due to the fact that Vilfredo Pareto was not good at explaining the principle to convince the public, the captivating discovery became inoperative for a generation. Even though few economists in the US knew its importance it did not gain the necessary fame until after the World War II that two aligned yet completely different leads began to make headlines with the 80/20 principle (Figure 1). (Koch 1998)

Figure 1: The 80/20 Principle



The Pareto rule or principle is of the assertion that a minority of causes, inputs or efforts lead to a majority of consequences, outputs or results. This means that 20% of your time spent on a job would result in the 80% of what you achieve. Thereby for all practical purposes, 4/5 of effort which accounts to a dominant part is greatly irrelevant. This is a contradiction to the expectation of many people. In this regard, the 80/20 rule asserts that there is an inbuilt imbalance between inputs and outputs, causes and results, efforts and rewards. The above figure shows this 80/20 relationship of 20 percent input to 80 percent output, 20 percent effort for 80 percent result and 20 percent causes for 80 percent consequences. (Koch 1998)

Many examples of the 80/20 rule have been validated in business. Indications that 20 percent of products sold account for 80 percent of the euro sales value; so do the 20 percent of customers account for the 80 percent of the organizations sales revenue. (Koch 1998)

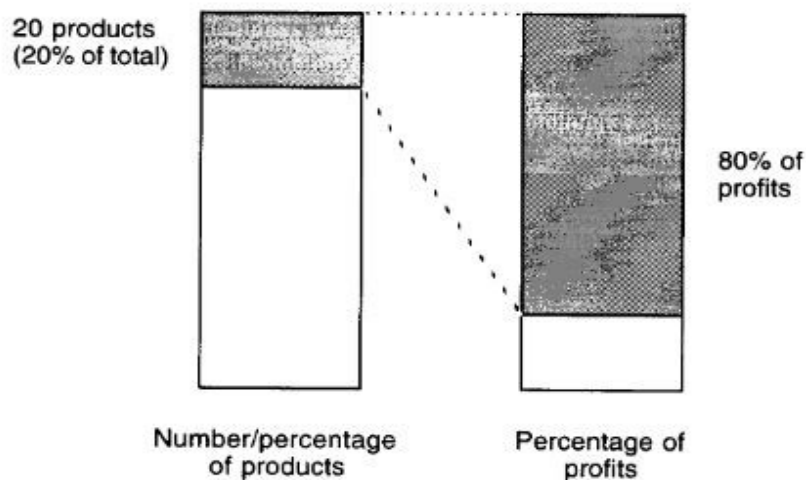
In society, 80 percent of the value of all crimes is related to 20 percent of criminals just as 80 percent of accidents are caused by 20 percent of motorists; 20 percent of students score 80 percent of the educational qualification available. In the home, 20 percent of one's clothes are worn 80 percent of the time. (Koch 1998)

1.12.1 Why the 80/20 rule is so important

The prime reason why the 80/20 principle is interesting is that it sounds illogical. Due to the notion that all causes will have more or less the same relevance just as all customers or clients are equally valuable. That every product, every business, every dollar of a sales revenue is as equal as the other. That all employees in a particular class have roughly equal value just as each day or each week or each year we spend has the same significance. That all the friends in our circle have more or less equal value to us just as all calls, emails or enquiries should be treated on equal measure. That one institution is as relevant as the other just as all problems have a large number of causes and for that matter it would be unfortunate to isolate a few significant causes. That all privileges are of roughly equal value, so we ought to treat them all equally. (Koch 1998)

According to Koch (1998), the 80/20 Principle argues that when two sets of data relating to causes and results are examined and analysed, the most likely outcome is will trail a pattern of imbalance of 65/35, 70/30, 75/25, 80/20, 95/5, or 99.9/0.1, or any set of numbers in between though the two numbers in the comparison do not have to add up to 100. This defies the 50/50 mental map which is obvious or rational that causes and results are equally balanced. Again, Koch (1998) asserts that “*The mentality that 50 percent of inputs or causes should equal to 50 percent of outputs or consequences is a fallacy.*” By this, the 80/20 principle also is of the assertion that when we get to understand the true relationship we are likely to be surprised at how unstable it is. That, whatever the actual level of instability is likely to exceed our prior projection – the 50/50 estimate. Figure 2 below is a representation of a typical 80/20 principle.

Figure 2: 20 products – 20% of total – yield 80% of the profits



Displayed on the right bar are the total profits of the company from the 100 products. Visualize that the yields from the one most valuable product are filled in from the top of the right-hand bar downwards with the notion that the most valuable product makes 20 per cent of total profits.

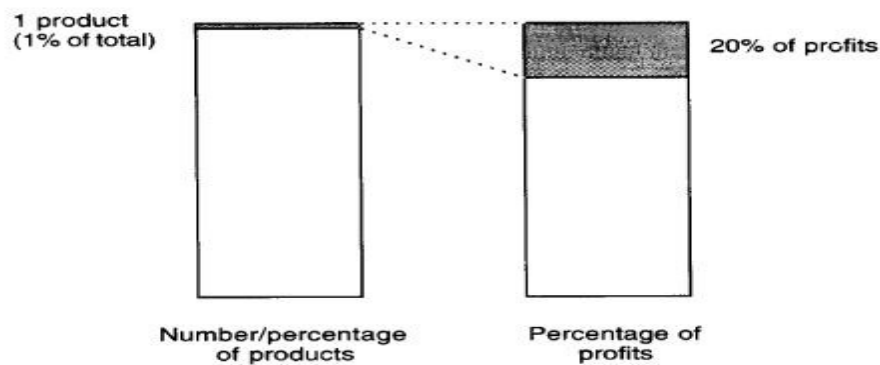


Figure 3: When 1 product – 1% of the total – makes 20% of total profits

Figure 3 therefore illustrates that one product, or 1 percent of the products taking one hundredth of the space on the left accounts for 20 percent of the yields. This relationship is seen in the shaded areas of the figure. By continuing to count the next most valuable item and so on down the bar, prior to we have the profits from the premier 20 products, we can then shade in the right-hand bar according to how much of the total profit these top 20 products account for. A demonstration of this effect is shown in Figure 2, where we see that 20 percent of the number of products making 80 percent of the total outputs (in the shaded area). Contrarily, in the light area, a flip-side of this relationship could be seen such that 80 percent of the profits contribute in total to 20 percent of the products. (Koch 1998)

The 80/20 numbers are only a benchmark, and the actual relationship may be more or less unstable than 80/20. The 80/20 Principle asserts however that in most cases the relationship is more probably to be closer to 80/20 than to 50/50. If all of the products in this example achieve the same profit, then the relationship would be as shown in diagram 4. It is interesting that when such investigations are conducted, Figure 3 turns out to be a much more usual pattern than Figure 4 which illustrates the general suspicion of the expectation of many (50 in, 50 out). This connotation that 50 pieces which makes 50% of products should result to 50% of the yield or output is a remedy for failure, disaster or in simple terms a fallacy. The 50/50 approach is just like the half empty/half full approach – where a percentage of persons see half filled glass and others see half empty glass. Except

that in this case the 50/50 pattern in reality seems palpable. Nearly always, a small share of total products yields a large share of profits. Of course, the exact relationship may not be 80/20. (Koch 1998)

The 80/20 principle is both a useful theory and a convenient metaphor but it is not the only pattern. In some cases, 80 percent of the profits are derived from 30 percent of the products or sometimes 80 percent of the profits drawn from 15 percent or even 10 percent of the products. (Koch 1998)

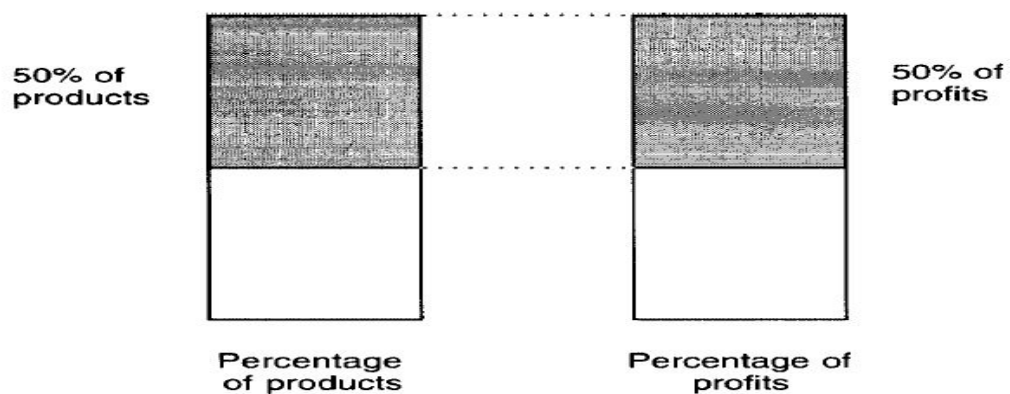


Figure 4: The unusual 50/50 pattern – an uncertainty

For one to be successfully apply the 80/20 Principle, it is required to have two sets of data summing up to 100 percent and one measuring a variable quantity owned, caused or exhibited by the things and people making up the other 100 percent. Koch argues that that 80/20 principle has emerged with useful and in several cases life-transforming insights and for that matter it is expected that one work out his or her own use of the principle – by being more creative. The theory can be applied by individuals or groups; homes or offices; private or public businesses; school or training centres. It can be adopted by managers, supervisors, business owners, regulators or legislators, researchers, human resource officers, marketing and sales executives to render services and for commercial activities.

It is argued by Koch (1998) that there are two distinct ways to utilize the 80/20 principle. The principle by tradition requires 80/20 analysis, and a quantitative

method to form the absolute relationship between inputs, efforts and causes and; outputs, rewards and results. This distinct application method is illustrated in the figure below:

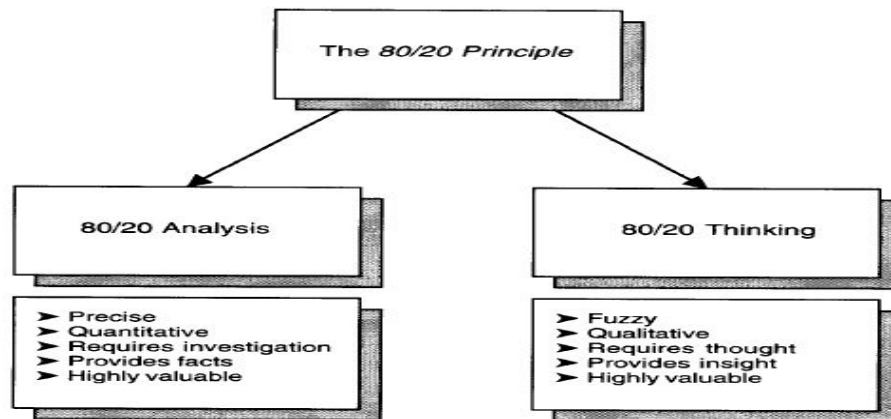


Figure 5: Two methods of applying the 80/20 principle

The application methods are based on the concept that people tend to be either analytical or thought oriented, analytical in the sense that their decision or way of seeing things is backed by systematic scrutiny of data which of course is collated in a reliable quantity, investigated to find the meaningful facts backing the collected data and evaluated to ascertain its value. On the other hand, thinkers also tend to use a quite similar scientific approach but then choose to use qualitative methods to gather relevant data which they process by thinking through the reason behind every bit of the data, provide insightful evidence and the value. The thinking illustration and the analysis approach do not invalidate each other, but rather both illustrations are salutary – this depends on how one sees the glass, either half-filled or half-empty the level of the water remains the same. (Koch 1998)

This study focuses on the Analyst approach, since it is backed by systematic scrutiny of data.

EMPIRICAL PART

This chapter presents the research methodology used in the thesis, including the choice of research method, selection of respondents, executing of the questionnaires and interviews; and collating and analysing of the results gained from the questionnaire and the interview. The reader gets to understand data, quantitative research, the characteristics of quantitative research and how it was applied to gather answers relating to the research topic. This chapter also contains charts and tables which was drawn from the quantitative findings. Followed by the quantitative findings is the qualitative research, giving account of responses from participants who matter to the topic.

The quantitative research questionnaire is measured using the nominal, interval and ordinal data measurement scales.

1.13 Research Method

There are two types of research methods. Quantitative method focuses on measurement of collected data and analysing the data for results through statistical analysis. In this research, the question which gathers the crucial responses forms the basis for the vital topic to be asked in the qualitative research. In this case the questionnaire is carefully constructed so as to capture enough detail which is then later expounded in the qualitative research. (Saunders 2011)

Qualitative research is the research method conducted through interviews – the interview could be face-to-face or via telephone or other media which enables the respondent and interviewer to communicate in time. The result is determined by the researcher by cautious analysis of the response to the questions put across. (Saunders 2011)

Empirical modern research in exportation has shown that standardization plays a major role in efficiency and production of goods and services, a role which is very crucial to tackle deficits in exports; (Stern 2003), for this and many other known

and unknown reasons, the need for utilizing qualitative and quantitative research methods simultaneously is crucial for precision.

Qualitative research methods are suitable to studying and getting in-depth information from respondents since it includes interviewing, observation and analysis. The researcher utilizes this method to fetch personal experiences and what meanings they attach to them. As per Merriam (2009) qualitative research:

- Should be constructive
 - focus on quality
 - meaningful, understanding, hypothesis, discovery as goals of investigation
 - Evolving and flexible design
 - Samples should be purposeful and non-random
 - Inaugural, constant comparative analyse mode
 - Researcher as a principal instrument, interviews, observations and document for data collection
 - Encyclopaedic, richly descriptive and holistic findings.
- (Merriam 2009)

The most significant characteristic of qualitative research is that the researcher constructs reality in interacting to the respondents. Constructionism thereby underlies what becomes the basis of qualitative study. (Merriam 2009, 23)

To achieve the aim of the research, the thesis includes theoretical and empirical sections. The theoretical foundation includes the explanation of EU Standards and Certifications for Exports; literature reviews and discussions; Relevance of EU Standards and Certifications in the export cycle and the 80/20 principle will aid to analyze the empirical findings about effectiveness of the export standards and certification for the export chain. Qualitative and quantitative research methods will be utilized for data collection. Face-to-face interviews will be conducted on sampled respondents in the cocoa export chain between Ghana and the EU.

For the sake of result quality, a semi-structured interview is chosen due to the nature of the case. The chosen method is conducive for gathering information. The questions to lead to the findings are relatively structured and flexible to use. This method aims at gathering specific data from respondents just as the interview is based on issues which are to be explored. To maintain cautious but constant flow of information, the order of wording is not predetermined. (Merriam 2009, 88, 89)

A semi-structured interview is suitable for this research because the main topics for discussion are about individual experiences and actions, and also their thoughts about the process.

1.14 DATA, the definition

Gleason (2015) defines data as a set of organized information; it is the measurement or quantification of the real world by a set of variables. Statistical data on the other hand are set of observations on which values of variables are given. The things that one controls, measures or manipulates in research problems are called variables.

The characteristics of data are:

- raw material for information
- distinct piece of information
- must be unprocessed or disorganized

(Gleason 2015)

Sample collection in qualitative research is usually small, non-random and chosen based on purpose; but, in this case there is quantitative research which has a large volume of data to analyse. The number of respondents is research-convenient (120 respondents for quantitative research and 6 respondents for the qualitative research) and the selection is at random and specific respectively. The complimentary usage of both quantitative and qualitative methods aided in this research. (Gleason 2015)

Interviews were conducted face-to-face in Ghana and via Skype in English language at random dates between December 2015 and August 2016. The choice of language is to ensure effective communication between interviewee and interviewer. The choice of Skype platform as a mode of communication was due to the fact that most of the respondents do not reside in Finland but in Ghana. The quantitative research gathered respondents from Ghana, the Netherlands, Denmark and Britain. The interviewees scouted for the quantitative research ranges from businessmen, government authorities in superior rankings, managers and field workers in the ports to shipping companies, students and lecturers, farmers and agents. The scouting provided six respondents for the qualitative research, out of the list includes one customs officer, one respondent for the freight forwarders, one respondent for the farmers union, one senior banker, one respondent from the COCOBOD, one respondent on behalf of logistics and one respondent on behalf of the Ghana Standards Authority.

To ease dissemination of information and not ready-prepared answers the questions asked were not posted to the respondents before the interview. The requirement for granting the interview was due to availability, opportunity and competence. Availability here means the willingness to grant the interview at a given time and with the consent to use the findings in the research.

Opportunity here means the ability for the interviewee to comment on the topic in the sense that the information would benefit academia and society.

Competence here is to define the experience and personal skills of the respondent, how important the experience of the respondent is to the topic for discussion.

1.15 QUANTITATIVE RESEARCH

Quantitative research can be simply referred to as research in numbers – or a research expressible in terms of amount or quantity.

Quantitative research is defined as research focused on traditional scientific methods, which create statistical data and usually seek to establish the causal relation-

ships between two or several variables with the aid of statistical methods to test the relevance and strength of the relationships. (Oxford 2008)

Gale (2008) on the other hand defines quantitative research as any research that utilizes numbers as the basis for making inferences about the case under study.

The more generally statistical approach in quantitative methods includes:

- Sampling of respondent
- Measurement
- Data analysis

Under the banner of quantitative research are many methodologies and data analysis strategies. Among these methodologies and data analysis strategies are *relational research*, *descriptive research*, and *experimental research*. The need for statistics in quantitative research is to reduce the difficulty in accessing an entire population as these are practically too large to study. Instead of the entire population the researcher focuses on samples he picks out of the general population.

Statistics enable the researcher to quantify the expected range of differences between a sample drawn at random and the population. The results are then reported in percentage terms of respondents who attended to each variable. This is then accompanied by a margin of error to express the expected range between the population from which the sample was drawn and the actual sample of the respondents. (Spalding 2016)

Secondly, statistical data in quantitative research involves statistical modelling of the interrelationships between variables. Quantitative research can also be used in group comparisons. In many cases quantitative research is contrasted with qualitative research. Survey design provides attitudes, quantitative or numeric descriptions of trends, or opinions of a population by studying a sample of that population. The researcher is able to generalize or able to draw the inference to the population. Even though this research is designed to be valid and reliable, in future longitudinal research – which is a survey that involves repeated observation

on the same variables, can be applied to this study to examine what happened to the data or information gathered over time. This approach will help advance the course of improving research and ensuring reliability and the validity of data. (Spalding 2016)

Reliability of data refers to recurrence of the findings. A study is deemed reliable if same results can be yielded if the study were to be done a second time. *Validity* in research seeks if the findings are genuine. It refers to the credibility or believability of a research or study. For example if a bag of cocoa is weighed today and it is 10kg, it should weigh 10kg when measured the next day or in a month or over time. In this case we can say that for a test to be reliable, it must also be valid since it must consistently report the same weight or similar every day it is placed on the scale. If data are reliable, it must be valid too. Reliable data consist of accounts generated by two or more measuring devices, and concern the same set of phenomena. (Krippendorff 2004)

1.15.1 The Quantitative Research Design

For the sake of reliability and validity of data, the sample for this research is drawn at a controlled random. Respondents ranged from persons who had a direct connection to the topic or indirectly had the knowledge or experience which deemed them fit to participate in the survey. In total the survey targeted at minimum 120 respondents and at maximum 180 respondents - the scale of relativity is considered in this manner. Sample collection in quantitative research depends entirely on the variable and for that matter one can simply apply the phrase that *“there is strength in numbers.”*

For effective but reliable data collection, the use of questionnaire was considered and different media platform was considered to convey the questionnaires across to the respondents in their comfort locations. Also, deadline to responding to the questionnaires and when to collate the result was also factored in, to ensure that the purpose of the research is achieved on time and is of acceptable quality.

The questionnaire which was in the forms of paper, e-form and document file were sent to the respondents through their convenient medium of receipt. A total of 100 respondents (representing 83.33% of the sample size) chose the internet as a medium of reception; they received the questionnaires by clicking on a link which was shared to them by email. Fifteen respondents – representing 12.50% preferred to answer via document file which they received through their specified mails after which they mailed back the completed form through the same channel. The rest of five respondents – representing 4.17% chose to answer on hard paper. In total the number of respondents counted to 120 individuals from the aforementioned stakeholder group.

The characteristics of quantitative research are not limited to facts that:

- Data is gathered using structured research instrument.
- Results are based on a large sample size that represents the populace.
- Researcher has clearly defined questions to which answers are sought to be analyzed.
- There is possibility to replicate the study given its high reliability.
- The researcher ensures that every aspect of the study is carefully designed before data collection.
- Data are often arranged in charts, tables, figures, or in the form of statistics and numbers, or other non-textual forms.
- Project can be used to investigate random relationships, observe concepts more widely, and predict future results.
- Computer software, questionnaires are used by the researcher to collect statistical data. (Spalding 2016)

There are numerous but specific research instruments/methods one could utilize when conducting quantitative research – tools such as questionnaires or scales or inventories or surveys. For the purpose of this study, the use of questionnaires has been chosen as the tool to be used to collect data from respondents.

Among the numerous but renowned software to analyse data – just to mention a few like SPSS, IBM SPSS Academic Solutions for students or Laerd Statistics. The software chosen to analyse this research is SPSS and Microsoft Excel database due to familiarity and the ease to use them. This is to meet the prime objective of quantitative study which entails classifying features, counting them, and constructing statistical models in the attempt to explain what is observed.

1.15.2 The Statistical Analysis of the Quantitative Survey

Statistical analysis in this quantitative research survey means using data analysis tools to gather the final report of the study. The tools used to analyse the data generated from all respondent are SPSS (Statistical Package for Social Sciences) application and Microsoft Excel. Using these two applications simultaneously is to ensure that the right correlation is drawn between variables; conduct multivariate analysis if necessary and also tabulation. SPSS is widely used by scientists and researchers to conduct various field reports – either to achieve report-quality output or for the purpose of statistical surveys or censuses.

The use of graphs, simple tables and diagrams is to show the frequency in occurrence while statistical tool like indices is to enable comparison by establishing statistical relationship between complex statistical modelling to variables. All these are achievable with the help of SPSS computer program. By crunching in the data gathered from respondents in a structured manner, the right answers are generated with an accuracy of 99.5 to 99.9%. The questionnaire is designed such that the answers are in ranges of ordinal, nominal, interval and some of the answers are in the Lickert Scale.

1.15.3 Quantitative Research findings

This stage is to clarify with analysis the responses generated from the 120 respondents. The findings come after all respondents have successfully completed the questionnaires submitted to them concerning the topic of study – effectiveness of EU Standards and Certifications on cocoa exports from Ghana. All respondents

have been active and the response rate (100% - a total of 120 respondents) to the questionnaires was encouraging. The response duration from receipt of questionnaire to completion and submission was by average 72 hours. All 120 respondents directly or indirectly share a concern and/or knowledge about the discussed topic.

A total of 29 of the respondents belonged to a firm of the size 1-10 personnel; 17 of the respondents to a firm as big as 11-20 personnel; 13 belonged to a group size of 21-30 personnel; 45 belonged to a size of 31-40 personnel and the remaining 16 belonged to a firm of the size 41 plus. The demographic of the respondent by industry also gave a projection of 15 persons from the import and export industry; a total of 14 respondents from the banking and finance sector; a total of 30 from the education sector; 16 respondents from government and 45 which represent the mass emerged from the agricultural sector.

Among the many features of the respondents include the working duration each one of them had in their respective sectors. 31 respondents have been in their respective field for 0-5 years; 10 of the respondents also for a period of 6-10 years; 45 respondents have also been working for a period of 11-15 years; 19 and 15 respondents with a work related experience of 16-20 years and 21 plus years respectively.

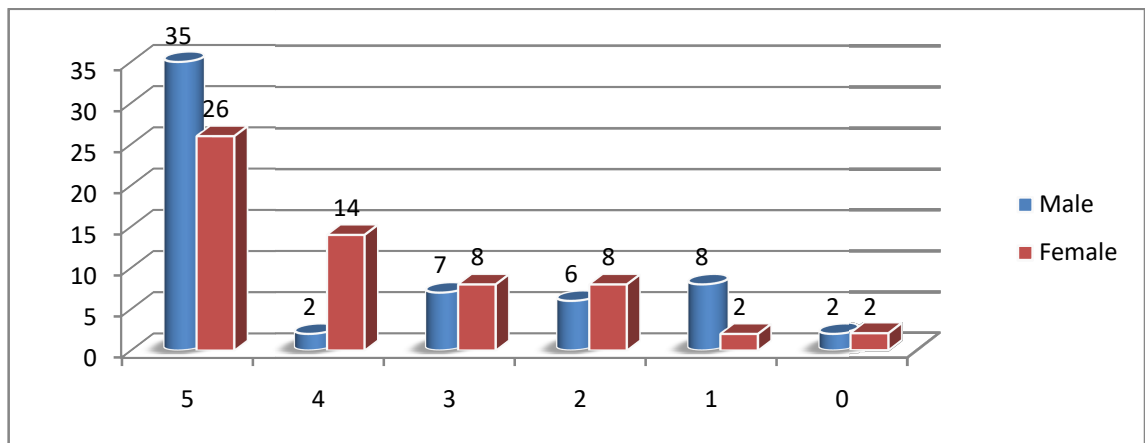


Chart 4: Relevance of EU Standards in Cocoa Business

Chart 4 represents the view of the 120 respondents concerning the relevance of EU standards in the agro-business – precisely, cocoa production. Among the 120 respondents 35 males and 26 females totalling 61 respondents strongly agree to the relevance of EU Standards in Cocoa Business; 2 males and 14 females totalling 16 respondents agree; 7 male, 8 females summing to 15 respondents neither agree nor disagree; 6 male, 8 female totalling 14 respondents disagree; 8 male, 2 female respondents strongly disagree; and 2 male, 2 females ignored to comment on the relevancy of EU Standards in Cocoa Business. By this analysis it demonstrates that 50.83% of the respondents strongly agree leaving a population of 45.83% in the position of agree and strongly disagree and 3.33% of the population not commenting. Again a total of 98 respondents answered yes to the need of standards and certification in cocoa business; 7 respondents answered no to that effect leaving a total of 15 respondents answering maybe to the question.

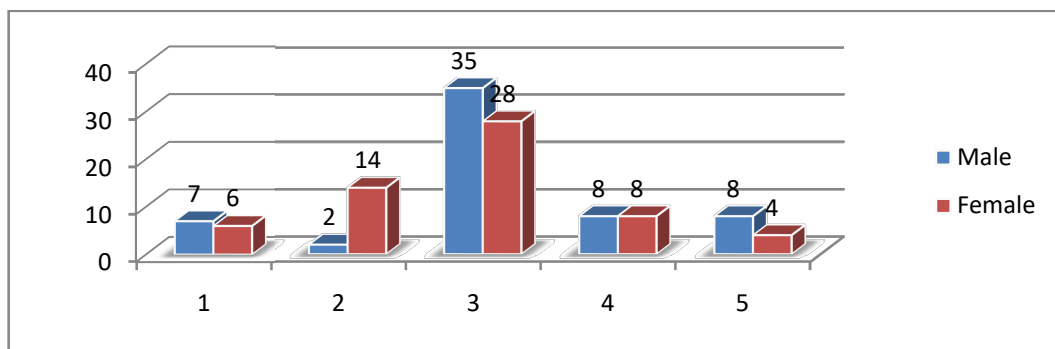


Chart 5: Ease to adopt EU Standards in working environment

Chart 5 is a representation of the views of the respondents on how easy it is to adopt EU standards in the working environment. The answers provided reflects upon how they understood the question and by that, answered as following; 12 respondents made up of 8 males and 4 females strongly agree that it was easy to adopt EU standards in their working environment; a total of 16 agree; a large majority of 63 respondents neither agree nor disagree; another 16 disagree; and a final 13 respondent strongly disagree to that effect.

Furthermore, when asked if compliance to EU standards is effective, a large majority of 97 (80.83%) respondents answered yes, 7 (5.84%) out of 120 respondents answered no and 16 (13.33%) respondents of the sample answered maybe to the question. 86 respondents representing 72% had pre-knowledge of EU standards while 34 or them representing 28% answered no to that effect. When asked how they were able to conclude that they had pre-knowledge, 48 respondents believe the EU requirement matched 0-50% of their current practice and the remaining 72 respondents (60%) answered that the EU requirement matched 51-100% of their current practice.

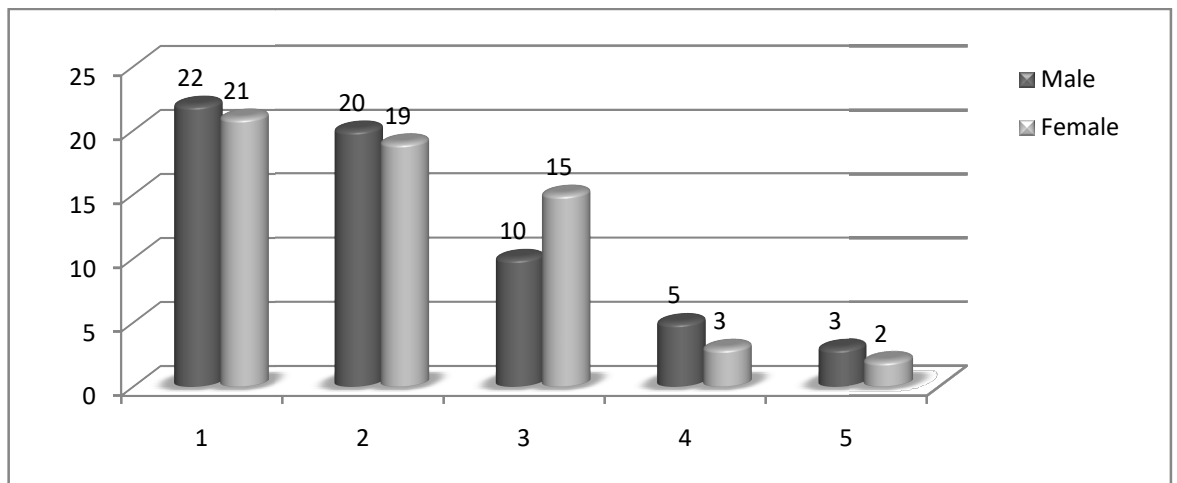


Chart 6: Respondent by age group

The above chart 6 is a graphical representation of the respondents by their age groups. The respondents are of the ages 20 to 65 and above. Category 1 is respondents of the ages 20 to 30 years; category 2 respondents of the ages 31 to 40 years; category 3 represents respondents of 41-50 years; category 4 is the group ranging from 51-60 years; and, category 5 representing the group 61 years and above.

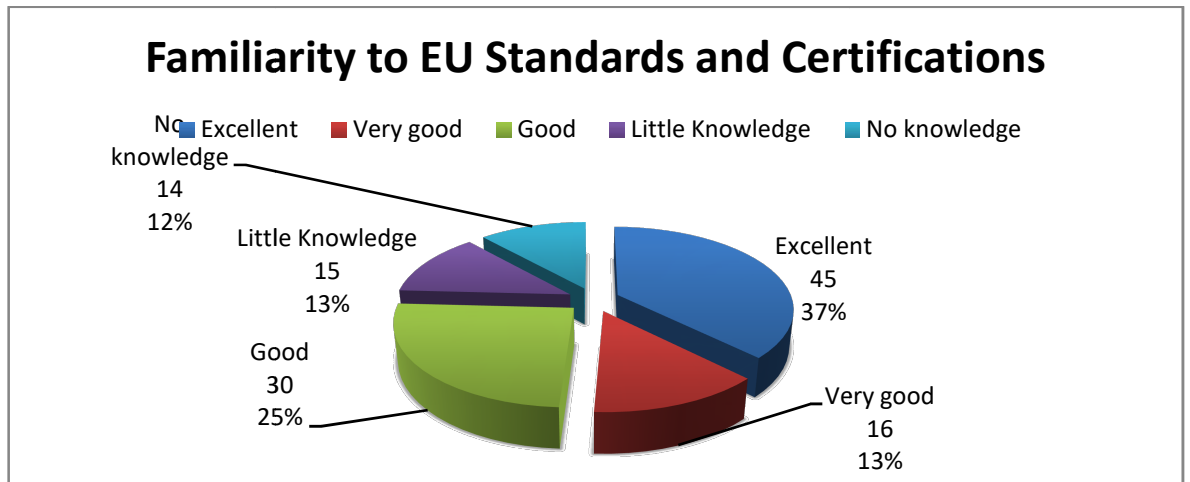


Chart 7: Respondent familiarity to EU Standards and Certifications

Chart 7 gives a representation of respondents' familiarity with EU Standards and Certifications. The count is as follows, 37% of the respondent answered excellent on the questionnaire to answer their familiarity to EU standards and certifications whereas 13% answered very good; 25% of the populace answered good; 13% and 12% of the total respondents answered with little knowledge and no knowledge respectively.

In total all 120 respondents answered the question at a 100% response rate – this was achieved as a result of the two-way feedback system implemented to ensure that every respondent attends to every question on the questionnaire by this method the likelihood to eliminate the less-frequent responders in the sample which could lead to high bias according to Oosterveld (2005) was avoided. This therefore demonstrates that a great number of 91 respondents (75%) are satisfactorily familiar or absolutely familiar when it comes to EU standards and the necessary certifications to back those standards. 102 of the respondents answered yes to EU Standards and Certification being a requirement for their day-to-day activities while the rest of 18 respondents answered no to that effect. In this context it is undeniable that 85% representing a greater number of 102 of the sample representing the commodity chain, see compliance to EU Standards and Certification as a requirement for them to do their job effectively. Chart 8 below shows the capture

duration – how long it took the respondents to become familiarized with the EU Standards.

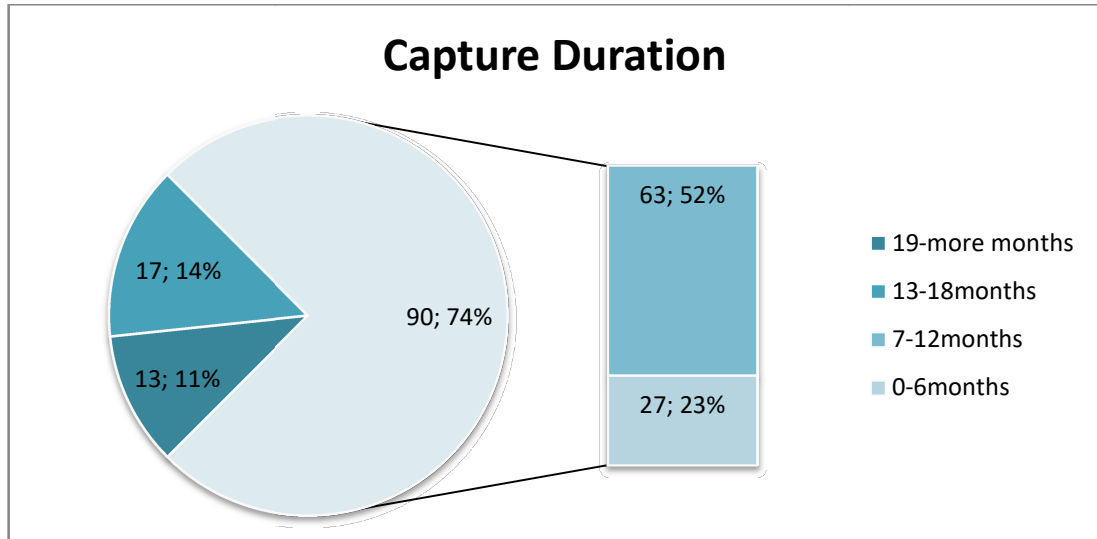


Chart 8: Capture Duration by months

By this presentation it is evident that the large majority of 90 (74%) respondents were able to capture the respective EU standards between 0-12 months. The rest of 26% were in the category of persons who believe they were able to capture the applicable standards between a period of 13-18 months and more. By this finding, one can almost say that standards play a vital role for persons in the cocoa business between Ghana and the European Union due to the compliance attitude of the respondents and how relevant they see EU standards in par with their daily routines at work to the extent that a large majority who represent the industry found it convenient to capture the required standard for their businesses within 0-12 months. The difference in the group also highlights the fact that every individual is governed by a law of relativity – due to the different factor, character or skill each person brings aboard the industry, how long it will take each person to migrate or enrol unto a program, the tests or initiations each one will pass through and et cetera.

Comparing chart 7 to chart 4, we see a high interest in terms of compliance to standards as a result of the greater number of respondents belonging to the group

who see the relevance of EU Standards. In chart 4 the greater number accounted for 50.83% while in chart 7 the number increased to 74% of the respondent population.

To find out the relevance of Hofstede's theory on cultural dimension, the question if they find job orientation before commencing work relevant gathered 41 respondents (34%) yes and 79 respondents (66%) no's respectively. Again, 91 persons representing 76% believes compliance to standards has enabled them avoid future uncertainties and the remaining 29 persons representing 24% answered no to that effect. A population of 88 respondents (73%) believes they are able to effect EU standards in their work between 40-100%.

On the question if compliance to EU Standards and certifications is a prerequisite for the respondent in their line of business, the respondent was to respond either yes or no. The No's accounted for 5.83% (7 respondents) and the Yes's scored the higher percent of 94.17 (a total of 113 respondents). On the flip side compliance with EU Standards and Certification improved upon quality of activity according to the respondents as a majority of 95.67% answered yes leaving a minority of 4.33% answering no to the question. As to if the respondents have challenges with compliance to the EU Standards, the answer was as follows:

- A total of 72 respondents representing 60% of the sample size answered yes – this group do not find challenges when it comes to compliance with the standards and certifications.
- The second group of 35 respondents representing 29.17% of the sample size answered maybe – this group are persons who find little of no difficulty when it comes to compliance with standards and certifications to the respective fields.
- A total of 13 respondents representing 10.83% answered no to that effect – this group find it challenging when it comes to compliance with standards and certifications. The qualitative part of the study gives a detail to why they believe it is challenging to comply with the directives.

1.16 DATA ANALYSIS: Qualitative research

Data analysis in this context means examining the information gathered from the respondents methodologically and in detail to account for the best and reliable interpretation. Analyzing the information gathered from the respondents was of the interest to draw emphasis on convergent reasoning rather than divergent reasoning. This was done by first getting each and every respondents comment transcribed. Getting the responses documented gives the opportunity to have a clear overview of what has been discussed during the interview. The next step which followed was establishing the background of the participants to give clarity on who is behind which response. Drawing the difference gives the enablement to further analysis since each interviewee can be linked directly to their content (Polkinghorne 2005).

The next step in the data analysis is to examine and highlight context from question to question to serve as a basis in the final result finding. This part of the research was time consuming due to the fact that the end result must be reliable and valid. During the analysis, each question was analysed based on its category. The results of the analysis were written simultaneously. The result must be reliable in the sense that it should always reflect the exact views of the respondent from time to time should it be checked by another person or party. The fact that this is a research material means the source should be worthy – in this regard the respondents are persons who have or are affected or/and of significance to the topic.

DISCUSSION AND IMPLICATIONS

This stage of the research is the testament of the participants to the various significant questions presented to them. It is in brief but concise to what they understand the questions to be and how they relate it to their field of expertise. The cautiousness of presentation is to ensure reliability and validity of the findings. The answers here are derived from the questions asked during the interview of the participants. Three important elements were considered during the interview – these are in categories such as personality (includes profession, age, gender, position,

years of experience et al); location (includes where the person lives, place of work, other geographic information), research participants may consciously or unconsciously position themselves differently with respect to the numerous roles and identities that structure their experience of different environments. Locations are a part of the many ways that responder's roles, identities, and power are constituted in the interview experience. (Elwood & Martin 2000, 654); reliability here includes the trustworthiness of the person and his information, how he fits in the topic, if the information can be verified over time and from another source, the link between the information and research, interest in delivering information regarding the topic since the data gathered in the qualitative research is to provide evidence for the experience it is investigating. (Polkinghorne 2005)

Time was also taken seriously to ensure accuracy and flow of information. It is not deniable that the participants for the research are from varied fields and for that reason have different allocation of time to grant a successful interview. The length of the interviewing duration is crucial factor in maximizing response rate in surveys. (Halpenny & Ambrose 2006)

The mode of the interview also affects the time which suits the participant to grant the interview. The choice of language also plays a role in collating the result of the finding. (Polkinghorne 2005) In this research the English language was ideal for the majority of six participants. This was a good choice in the sense that language fluency also affects the accuracy of the result especially in the case where the information being collected is to be human lived experience – a life-world as it is felt, made sense of, undergone, and accomplished by human beings that is the object of the study; (Schwandt 2001, 84) the cocoa farmers, even though with some having to an average formal education but experts of their chosen professions delegated a spokesperson on their behalf – the leader of the union.

Emphasis was also placed on ensuring that there is a clear distinction between opinions and facts. Oxford (2017) defines opinion as judgement formed about something, not necessarily based on knowledge or fact whereas fact is defined as

a thing that is proved or known to be true, or a piece of information used as part of a report, news article or evidence.

The criteria for answering base on facts were to draw emphasis on the participants experience and how relevant it is to the topic, and also comparing their responses to the answers generated in the quantitative study or a comparison to media publications, gazette and other research journals. When opinions and attitudes are discussed, one could find it difficult to get a deeper understanding and draw analysis. This depends on the willingness of the participant to share their thoughts and how much they are willing to share those thoughts especially when it is for public consumption.

One major thing that comes into evidence is that, the more the discussion the more in-depth one gets to the topic. Another area one also needed to concentrate in discussion is body language – which has to do with the ability of the participant to reflectively discern aspects of their own experience or encounter and to communicate effectively these discernments through the symbols or language. (Polkinghorne 2005) The reaction of the participant to the questions presented to them matters since it can prove to a point whether they are passionate about the topic and believe in the answers they provide. (Polkinghorne 2005) This is to be evident among participants asked questions which seemed to be sensitive especially when it is not deniable that the sector has suffered some setbacks over the period in Ghana and for that reason participants' willingness to comment on the subject with the hope of contributing in combating mutual and unforeseen challenges should be crucial.

My role in conducting this research is also based on the fact that I find the topic more interesting since it relates much to a cash crop playing an important role in the socio-economic life of all Ghanaians home and abroad. A crop which undoubtedly decides to what direction the national GDP should move towards.

1.17 Participant's Background Information

A background presentation of the participants' is provided in this section. The relevancy which is the duration they have worked in the field, the sectors they work, expertise and how it affects the research "Effectiveness of EU Standards and Certification in Cocoa Imports from Ghana." The confidentiality of the respondents is considered and all rights are reserved as to what information they want to be available for the public.

1.17.1 Participant 1

This participant heads a union of cocoa farmers in Tarkwa a local village in Ghana; he has held the position for six consecutive years. As a cocoa farmer and a union member, he qualifies to understand the field much better and his answers reflect the significant many for the research. His determination to find simple but effective answers for his union is what drives him to partake in the research.

This participant has been working as a cocoa farmer 32 years now, he farms using the traditional methods he practiced from his father with a combination of some guidelines from the board in charge of cocoa marketing in Ghana (COCOBOD). He also mentions that members of his union also use the same approach to grow their crops. They share the same method of clearing the land; the same method of planting the trees; pruning them; and same methods of fighting infections to even the same harvesting methods.

He mentioned that their forefathers happen to follow the same routine in the cultivation of the crop and for that matter it was not difficult to pass it down from one generation to the other. In their day-to-day life on the farm, it is very important to remember and follow the same kind of procedure if one is to be successful. Failure to follow simple farming procedure as to the tool to use at which time; when to do what to the crop; how it should be done and etc could result in a fruitless harvest which inevitably would leave the farmer bankrupt. This participant also believes that without a proper procedure, it is very difficult to even deal with

agencies such as banks for loans to purchase agro products and also agents who purchase the beans. He believes that standardization is very helpful since it has over the years proven to enhance performance for the union. He believes that standards are necessary to ensure that the collective harvest of the cocoa beans from different farms would be of same kind and presentable to the buyer.

He further adds that, to ensure that loss in production is minimized, a continuous practice or repetition of a once successful procedure is followed to the latter. However, when asked if he had any knowledge about the standard the industry is expected to meet by EU requirement, he responded the negative. He mentioned that as a union, they only go by the directives of their buyer (agents) and do not question where those directives come from so long as it benefits everyone.

Participant 1 strongly agrees without assuming to the fact that he believe EU Standards and Certification are of importance to cocoa farmers because it ensures that farmers deliver to meet expectation. This he thinks goes far beyond to set a distinction between cocoa beans exported from Ghana and cocoa beans from other countries.

When asked if they are always happy to follow the directives by their buyers, he mentioned that in a large extent they do not feel pleased but after getting educated about the reason behind such directives they accept them by consensus. The directives come at a cost to farmers and for that reason farmers find it burdensome. Cost which result from labour, security, pesticide control, fertilization and preservation of cocoa beans for sale. All these costs are related to the strict directive the farmer must go through to make the cocoa beans ready for the agent.

Participant 1 argued that the high cost of operating the cocoa farms has left some farmers to find other alternatives such as illegal mining otherwise referred to as “Galamsey”. Some farmers have resulted in mining their farmlands in the search of gold. Due to their lack of experience to mine the precious substance, they end up poisoning the land and other water bodies which in the long run affect the soil quality and the possibility to irrigate cocoa farms. The result of these illegal min-

ing practices causes the farming sector to lose hundreds of hectares of arable lands and also result in export deficit of the commodity.

On the part of the local farmers, participant 1 stresses that negligence and lack of education attributes to a high margin of farmers not being able to meet the required target set for them. The neglect of farm lands to persons who have no knowledge of the land to cater for; negligence which goes to the extent of allowing chemicals which are not approved to be used on the plant; negligence which involves the lease of cocoa lands to be used for activities which would not retain the land but destroy them.

1.17.2 Participant 2

This participant is a customs officer at the port of the country; he leads a team of 15 officers who are in charge of inspection of perishable goods and agro products leaving the shores of the country to the EU. He has worked in this division for ten years and holds higher repute for his dedication to duty and experience as an exercise officer. This participant lives in the capital, few kilometres to the Tema port and is a descendant of a cocoa farmer.

For his many years as an officer, participant 2 emphasizes that he could not have functioned properly at the port if there were no procedures to follow; rules and guidelines on documentations required to clear what goods, or to ship which goods from and to the country. Participant 2 defines standards as the set of rules that spells out how to operate, the steps and procedures to follow, with the aim of meeting an exemplified quality or benchmark.

He believes that a clear definition of the standard required for cocoa beans and the formalities of which the consignment should undergo do not only make the exportation process easier but also saves time and cost of operation. When asked how standards affects lean exportation, he responded that it does because there is availability of sample definition, the customs officer can quickly make the call should

the beans to be exported do not meet the importers requirement – matching the cocoa by the defined grades.

Standards and certification should be the prerequisite for custom duties to create a trustworthy environment between the exporting country and the importing country. In terms of safety and security concern, participant 2 believes that following the specified standardization limits the possibility of exporting harmful produce out of the borders to the importing countries and for that matter the approach is good for humanity. Again, he expressed his concern that the EU directives on Standards and Certification is too cumbersome and it would be difficult for a small team to follow it to the latter especially when it comes to efficiency of duty at the ports. On safety and security, he agrees to the fact that a safety regulation should always be included when setting standards for custom duties. Participant 2 believes that working with a clear definition on what document backs what item and which documentation follows which process, has contributed to give his team the experience they hold now, the experience to perform their job and be responsible for their actions.

Participant 2 also believes that there is a need to have a standard definition on goods exported from Ghana to the European Union. He supports his point to the role of standards creating the enabling environment for the agency to build strong ties with their EU partners. On a scale of 0-5 where 0 is disagreement and 5 is strongly agreement, participant 2 picks 4 to make a stand that for Ghana to be able to export goods to their European counterpart, it is important that exporters comply with EU Standards and Certifications, especially exporters of cocoa beans and its products. This should include compliance to how the produce should be grown; mode of packaging and storage; mode of marking and labelling; mode of transportation; and mode of documentation of the consignment.

As for other benefits, participant 2 concurs to theory that standards has enabled the board to be able to make their projections to maximize their yearly quota on levies and duties collected at the port on agro produce.

1.17.3 Participant 3

For 17 years in the field of logistics, participant 3 has dedicated much of his passion to moving goods from farms in remote locations to the port in the capital, to be shipped to Europe. Among the consignments he conveys include: cashew nuts, sheanut and cocoa beans. He understands the terrain of the country very well. Participant 3 currently holds the position of a fleet manager, a position he held onto from the year 2011. His many years in the service industry credit him with the privilege to grant this interview. It is without doubt that his knowledge about the logistic industry is interesting to be shared.

Participant 3 argues that it is necessary to have a rulebook about how to carry specified goods; what condition the carriage must meet; what quantity of what is to be carried by which vehicle; and, what route to access for faster pickup and delivery of goods from the farm to the port and into the vessel (shipping). The necessity to be efficient with goods from point A to B is what defines our *modus operandi*. He emphasize that “it is one thing setting standards and another to let those standards set in play.”

The help of a guided definition for communication between driver and fleet manager makes it easier for all parties to work within his responsible circle. The convenience of certification serves as backup for each process in the operation ensuring that there is the ability to adjust to uncertainties.

On a scale of 0 to 5, participant 3 agrees (4) that compliance to EU Standards and Certification would promote investments between Ghana and the European Union and also create an enabling environment for the cocoa sector to thrive. In future he expects much improvement in the supply chain management of the cash crop if all stakeholders take their jobs seriously and focus on achieving the best result spelt out to them.

1.17.4 Participant 4

As a top official of Ghana's COCOBOD, participant 4 has worked for 30 years in the board and deals with the purchasing of cocoa produce from farmers in the farming communities. As a member of the purchasing team, and a higher degree holder in Supply Chain Management, he has applied lenient but efficient methods to stay on the job and deliver his duties adequately. This participant communicates fluently in English language and is willing to grant interview for academic research. His many years of service and knowledge about the cocoa industry make him an ideal spokesman to be interviewed on the topic.

Participant 4 defines standards to be the set of guidelines which defines what kind of produce requires what price; the mode and procedure to consider in procurement; the set of principles to consider to settle the cost of the produce; documentations involved in the purchasing process; time to initiate payment and the channel to utilize in initiating such payment.

This participant takes his command from senior colleagues. He is guided by purchasing templates and computer applications which give him the enablement to coordinate agents to the field. Every member in the purchase team applies the same procedure in drafting purchase requisitions, purchase order and order for quotation. Participant 4 argues that without the necessary tools and, failure to follow the laid down protocol and procedure would not only create difficulty in finding a transaction but also make it difficult for the team to file their periodic reports. Some of the challenges he mention they face as a team includes communication. He attributes this to the delay in communicating new changes in procedure to the entire team. Sometimes the purchase team in the remote location tend to get their information late – due to poor network infrastructure; which inadvertently affects initiated and new transactions.

To be able to meet the standard of the board, the team work on a task-to-task basis. Each person is assigned to a specified task at a given period and is not assigned unto another except the first assignment is completed. Each member is to

design his own plan so as to meet the deadline set by the supervisor. This he believes has proven to improve the performance of the team and wield their experience in their respective fields. In this case participant 4 identifies three separate standards in his team. They include:

- Individual Standard: These are standards set by the individuals to ensure that they are able to carry out their respective duties by the deadline. For example, the employee could aim at reducing the transaction time by looking forward to a benchmark – an earlier transaction. This he does continuously until a new time record is set. In doing this he try as much to avoid discrepancies and other errors which may arise. With a manual to guide him to correct mistakes, he works in his personal space having in mind that there is always a team to fall on should the need arise.
- Team Standard: These include the set of principles, procedure and applications used by the team to ensure smooth delivery of duty and create the platform for effective procurement of produce.
- Organisational Standard: This happens to be the fundamental procedure or framework all members of the board should meet collectively. It stands as the primary goal for each and every member of the board. It is a must that individual standards and team standards do not contradict the organizational standard.

Among the many things participant 4 mentioned in his submission includes 3 important blunders which he believes is what affect the board to achieve their target. These blunders include:

- Negligence and Insubordination: By saying so he meant sometimes workers abandon their duties without notifying the team; even though this happens rarely, it sets the team many working hours behind to recoup any error that negligence might have caused. Neglecting ones duty without any substantial reason is unacceptable yet unavoidable due to the fact that workers perform their duties in their personal space.

- **Corrupt Practices:** Inasmuch as the team have tools to fight corrupt practices, he believes that the will to fight the canker is not effective enough to root it out completely from the system. Some of the challenges corrupt practices can create for the team includes poor validation of document; shabby contracts and deals; and financial misappropriation. When this act sets in, the team find it difficult to meet the standard requirement thus causing poor delivery or even failure.
- **Lack of Training:** Lack of training is also one of the blunders to affect standards. When members are fully trained, they are able to apply fully the knowledge to get the expected result assigned to them. Failure to get the right training or lack of it could result malfunctioning or not functioning at all. It becomes difficult for the team to cooperate on a simple task and for that individual to perform a delicate task. Indirectly this avoidable act cost the board in time, money and logistics. It is therefore important to offer pre and on-job training so that newcomers can match up to the expectation of the team they are being assigned to. He also believes that it would even be more helpful if periodic assessment can be coupled with on-sight assessment – persons who exhibit signs of poor performance should be assessed instantly to avert damages to operational and organizational standards.
- **Poor Judgement:** Since the purchase and procurement teams' duty includes making judgment on documents and also a follow-up on requests such as order of quotation, purchase order and purchase requisition. It somehow occurs that an employee would make an oversight which as a result may affect the chain of operation – within the team and to other stakeholders. On a top level this uncertainty affects the job quality and reputation of the organization. Among the many challenges, poor judgement caused by oversight to detail could be avoided if personnel exercise caution while on duty. He believes if that is done, the probability to achieve 99.9% standard is possible.

1.17.5 Participant 5

This participant has worked in a senior position for eight years at the Ghana Standards Authority. In his many years of service for the authority he has been responsible for making decisions which affect the approval of goods to be imported and those which are to be exported out of the country. He heads a group of ten officers to monitor and evaluate standards. His much dedication to duty and experience in this field gives make him a good candidate to grant this interview. Aside he meeting the requirement for this research, participant 5 is also willing to share his experience about the topic for the benefit of academia.

Participant 5 believes that standards should serve as basis for drafting laws and policies to regulate and protect the flow of goods on a local, national, corporate and international level. He emphasize that, should the mutual benefit of parties drafting this standards are taking into consideration, there would not be room for mistrust, bad fate or lack of interest but rather there would be urgency by all parties to commit to productivity, efficiency and the zeal to grow a strong and lasting relationship. He believes that compliance with the directives is also going to improve creditworthiness, encourage the importing partner nations to support with subsidies, grants or other financial aids when needed by the exporting partner to achieve the objectives of the standards.

Participant 5 also mentions that he finds EU Standards and Certification somehow harsh on the local farmer due to the fact it cost the local farmer much to grow the crop to meet the befitting standard spelt out by the EU. For example in cases where farmers have to spend much on labourers to tend to their farm even when they have children who could do such tasks at little or no cost, the farmers have to comply to the fair-trade guideline which prohibit or sanctions the purchase of beans from farms where there is the possibility of child labouring. To meet the requirement leaves the farmer to work for many man-hours even when those hours may be insignificant in the selling price of the cocoa beans. Participant 5 also believes that with strategic and effective funding, farmers can meet set stan-

dards. Funding which goes into purchasing equipment and tools for the farmers; a cushion for farmers to settle cost of labourers; agro loans and other important projects such as roads to transport the beans from the farms; schools to educate children in the farming communities and more educational programmes for the farmers on compliance to the EU Standards and Certifications on cocoa beans and the conservation of cocoa lands. These pragmatic measures would not only educate the farmer to comply with the standards for quality yield but would also help the nation to fill the gap in export deficit of the commodity – by increasing the tonnage yearly.

Participant 5 also asserts that compliance to EU Standards and Certification concerning cocoa exports has also improved upon the education of children in cocoa communities. Farmers in the farming communities are left with no option but to send their children to school if not risk the boycott of their harvest. The fair-trade practice which aims at preventing poverty, unethical labour conditions and environmental degradation stands in the way to ensure that people and the environment are prioritized before profits or anything else.

1.17.6 Participant 6

This participant is a freight forwarder in the capital. He handles the flow of large stockpiles of commodities to and fro the country. Over his 12 years as a freight forwarder, he has handles delicate tasks which result in making important decisions for the firm. He heads a staff of 15 in a firm of the size of 50 employees. Participant 6 many years of service and technical expertise has given him the experience to understand the topic. This participant is committed to duty and works by a standard procedure which involves cooperating with stakeholders in the export chain. These stakeholders are of the likes of farmers, customs agents, shippers, clearing agents, bankers, buyers and sellers of cocoa beans and products.

Participant 6 believes that EU Standards and Certification concerning cocoa exports from Ghana is very important in the sense that it gives the freight forwarder a sense of direction on how to handle the paper works concerning the purchase

and exportation of the commodity to the EU nations. The guidelines on how to file the paperwork from the point of purchase to loading onto the vessel to reaching the buyer all play the role of enhancing the swift conveyance of the commodity from the buyer to the seller especially when there is a chain of bureaucracy to break. The simplicity of exports depends on easy procedure in the supply chain which is encapsulated in how reliable the standards are and the adoptability of those standards by all stakeholders.

The effectiveness of the Standard in his context is measurable if former transactions which passed through no procedure are compared to transactions which occurred under scrutiny and laid down procedure - effectiveness which affects transactional time; cost, workflow and the human capital are all measured in the same manner. A periodic reporting also made it possible for comparing previous transactions with the current and the indications are evident that having a guided procedure enhances performance in handling and forwarding of freight.

On a scale of 0-5, participant 6 believes that the effectiveness of EU Standards and Certification in exports of the commodity should be 4 based on the aforementioned argument. Participant 6 also urges that it will be more prudent should all stakeholders take seriously the enforcement of standards in their transactions since it will go a long way to strengthen the cocoa industry and ensure productivity of the commodity for greater exports.

1.18 Table of Commonalities

Below are some of the commonalities among the six participants. These commonalities are detailed in their responses during the interview – thoughts, experiences and/or beliefs they share in common.

Side Number	Commonality	Participants					
		1	2	3	4	5	6
1	Relevancy of EU Standards	Yes	Yes	Yes	Yes	Yes	Yes
2	Complies with EU Standards	Yes	Yes	Yes	Yes	Yes	Yes
3	Thinks compliance guarantees buyer confidence	x	Yes	Yes	x	x	Yes
4	EU Standards affects positively	Yes	Yes	Yes	x	x	Yes
5	Compliance encourages long-term relationship	x	x	Yes	Yes	Yes	Yes
6	improves transactional time	Yes	Yes	Yes	Yes	Yes	Yes
7	Are familiar with the cocoa sector	Yes	Yes	Yes	Yes	Yes	Yes
8	Belong to a profession	Yes	Yes	Yes	Yes	Yes	Yes

Eliasson, Hansson et al (2012) question, do companies learn by exporting or learn to export was answered in the affirmative. Majority of the respondent share in common that EU Standards in regards to the export process has improved upon their performances. Again, Stern (2003) assertion of improving market access through standards is justifiable in this study as a result of the responses of the significant majority agreeing that compliance with EU Standards has create the enablement for smooth transaction between Ghana and the EU counterparts (*see commonalities 3,5,6*).

1.19 Involvement of EU Standards and Certification in Cocoa Exports

The in-depth interview of all the participants’ urges the need of involving EU Standards and Certification in the cocoa export chain. It is indisputable to say that all interviewees had one way or the other involved EU Standards and Certification in their line of work when it involves the European Union counterpart. Participant 1 thinks that more farmers should be involved in understanding EU Standards and

the certification involved when it comes to the commodity. He believes that trying to achieve the expected standard enables the farmer to perfect himself on proactive and reactive measures to combat crop related diseases, grooming of the trees and simple but effective methods to make good yields and risking minimal loss of cocoa beans. This participant also thinks that involving standards in the farming industry also protects the farmer from after-sale misfortunes such as buyer's discontentment of the commodity which peradventure places a serious cost for the entire chain – participants 4 and 5 are also of the same opinion.

Participants 2 and 3 think that, the involvement of EU standards and certification in the commodity export should be a prerequisite especially when it has to do with exports to Europe or its member states. This shared belief is as a result of the benefits their respective institutions have achieved from involving EU standards and certification in their transactions. While participant 3 focuses on the guideline which involves packing, marking and labelling of the commodity from the storage or farm to the port; participant 2 emphasize his belief based on the well detailed guideline on the documentation to back the commodity, the necessary inspection requirement, procedures, and the rules and regulations concerning the commodity. The guideline according to participant 2 also gives an idea of quota entitlement and also the related import tariffs, fees and duties. This he believes could not have been possible without a detailed EU Standards and Certification for exporting the commodity since every commodity is expected to have an HS Code (Harmonized Commodity Description and Coding System). Both participants are of the belief that new employees should be given training and equipped to be more inclusive in adopting the entirety of the EU Standards and certification in their collective but approved operations – persons who work or indirectly in any activity which would affect the export of the commodity from Ghana to the European Union. The discussion covered questions which were not fully answered in the quantitative research. For example the qualitative research shed more light on why some of the participants find it challenging to comply with the necessary standards even though at the same time they admit of the relevancy of the said standards. The challenges ranged from improper education on some part to inconsistency.

1.20 Involving all stakeholders to comply with EU Standards and Certification

Effectiveness in business permeates when all stakeholders take part from processing to finishing with the aim of meeting their mutual objective. In this study it was evident that the cocoa trade between Ghana and the European Union or the EFTA members could not have been possible if the stakeholders are not willing or do not comply with the EU directives concerning the commodity. It is a prerequisite for every stakeholder in the chain to play their respective roles for the mutual goals and objectives of both sides to be met. The findings showed a greater number of acceptances to comply with the directives from production of the cash crop to processing of the beans; from parking and labelling of the beans to transporting and loading of the commodity to be shipped to the European counterpart. Cocoa farmers, cocoa purchasing agents and managers of those agencies, freight forwarders and exporters, lecturers and persons in the agricultural faculty conducting cocoa research – Council for Scientific and Industrial Research (CSIR) food research institute, Customs and Excise Division, bankers and financiers, investors and brokers, Standards Authority, and the entire Agro Ministry and the constitutionally instituted branch for the commodity (COCOBOD) must all play their individual but collective roles so as to satisfy the needs of the importing partner (EU/EFTA) by complying with the directives concerning exporting the commodity. It is noted that failure to comply with the directives (which could be caused by negligence, unawareness or poor communication) could not only cost in monetary loss but also the reputation of the exporting country and the non-complaint party. Compliance is a step to encouraging and enforcing sustainable work practices which would go a long way to strengthening strong bonds between the importing and exporting companies, businesses or even government institutions. For this reason, it is believed by the stakeholders that the expectations of the EU Standards are being met which they justify by the continuous relationship between Ghana and the EU counterparts.

The study also highlighted some of the mechanisms put in place by the institutions and stakeholders to enforce the directives. Among them the participants mentioned the following:

- **Funding:** This includes funding in the form of subsidies and levies on agricultural and other agro-related products; compensations and discounts; and funding which goes into pesticide control and protection of cocoa land and encouraging farmers to continue cultivating the cash crop.
- **Communication:** This has to do with communication in the form of awareness programs, mass media or peer-to-peer; communication through government policies, memos, letters, posters et al; or the form of communication which goes beyond inclusion of all stakeholders in a two-way feedback system.
- **Education:** Knowledge acquisition which has to do with educating each and every stakeholder through formal or/and informal education in the form of training, workshops, joint voluntary initiatives; education in the form of advise, counselling and consultation; or other forms of training which goes deeper into guaranteeing service-to-commodity quality.
- **Enforcement:** A great majority of the participant believe that without proper enforcement they may not have been able to adhere to the directives laid down for them. Enforcement here is to do with implementing KPI's (Key Performance Indexes), enforcement which has to do with authorities of the state or at work, rewarding and punitive measures which looks at recognising good performance and sanctioning insubordination.
- **Evaluation:** This means evaluating S.M.A.R.T goals to understand if the goal was:
 - Specific enough – simple, sensible or significant to be met and if so, how it was met by the stakeholders.
 - Measurable – meaningful and motivating to be adopted and therefore ensure compliance.
 - Achievable – agreed, attainable by all persons in the export chain

- Relevant – reasonable, realistic, result-based.
- Time bound – time sensitive, timely or time-based.

CONCLUSIONS

Even in the era of innovation and cut-end technology, the commodity market has been faced with challenges, seemingly, showing staggering deficit in exports. The European Union who plays a major role in the purchase of the commodity is no exception in this case. As part of its purchasing policy for quality, safety and other regulatory measures, it has set of rules, procedures and protocols put in place for its trading partners – including exporters of cocoa beans. It is therefore a requirement that all persons who export the cash crop comply with these standards and its applicable certifications. This study explored the effects of EU Standards and Certifications on the part of the exporting partner (Ghana).

To achieve the aforementioned expectations, this thesis aimed at studying the effectiveness of EU Standards and certifications on cocoa exports from Ghana. It focused on compliance, importance and the relevancy of EU Standards and certifications on cocoa exports, why it is adopted and whether the players in the commodity chain comply with the standards; and, if they did, at what length and to what percentage of persons involved in the commodity chain complied with the EU specifications in regards to cultivating of the crop, to harvesting, sampling in grades, packaging, labelling, transportation and final delivery to the EU counterpart. Among these focus areas, the study aimed at finding if compliance to the standards has contributed in achieving its expectations, objectives or goals.

The study drew attention by establishing a foundation as to what is considered in exporting of cocoa beans from Ghana to Europe. It touched on subjects such as exportation – meaning, importance of exportation; standards and certifications and its importance; cocoa production, importance, inspection and quality, grading, marking and selling, code of practice; Ghana – the country, population, societal and cultural factors, economic outlook, legislation and politics.

The study is made up of both theoretical and empirical research methods. The theory encompasses of literature reviews highlighting on challenges facing the agricultural industry in Africa, improving of market access through standards, post knowledge and importance of acquiring skills from exports and achieving more with less. The theories made it possible to develop relevant questions to test on a research sample empirically. The empirical part of the study is a mixed method of quantitative and qualitative studies. The empirical part which presented the research methodology of the study was made up of partly-structured interviews with a number of six participants (of different backgrounds in relevant positions in the cocoa sector) interviewed. The theoretical and empirical study goes hand-in-hand because the theories such as the Pareto Principle and Hofstede theory on cultural dimension were tested in the empirical findings. For example, power distance according to Hofstede made it possible to understand the impact persons in higher position play in making compliance to standards possible. The modality of presentation of the result was to double check the quantitative findings to a qualitative one. The results of the study demonstrated that compliance with EU standards and certification has been effective in cocoa exports from Ghana. The study showed that stakeholders, contributors or/and players find the directives relevant and are willing to comply to ensure continual growth and success of the commodity trade between buyer and seller and to strengthen the bond of a lasting relationship and trust between the exporting nation and the importing counterpart (EU/EFTA).

Even though to a percentage of persons involved in the commodity export cycle could not relate to the relevance of EU standards and certifications to their respective duties and activities which directly or indirectly factor into achieving quality beans, safety and compliance to rules and regulations, a significant percentage admitted the need to comply fully with the EU directives. Factoring in the 80/20 rule will mean that indeed 20% of persons who comply with the EU directives concerning the cash crop affect 80% of the transactions to meeting the standards deemed for the commodity by the European importer. By this comparison it can also be concluded that 88 respondents making 73% comply with the measures put

in place in their respective workplaces, then it is not a threat that the commodity will lose to appease the importing partner in terms of quality.

The study also showed that pre-knowledge is also important when it comes to compliance with standards, directives or protocols. Some of the participants had pre-knowledge – an experience or knowledge gathered over the years from one generation to another on various topics. This knowledge served as a foundation upon which they were able to build the new knowledge – that which has to do with meeting a benchmark, standard or directive for mutual respect and benefit.

The following can be described as three types of compliance groups found:

- **Compliance by Intuition:** These are the persons who could apply to a certain level instinctive approaches which by coincidence meet the criteria or objectives of EU Standards – for example the farmers group passed the knowledge of sustainable farming from one generation hence work within the limit of fair-trade practices.
- **Compliance by directive or supervision:** These are persons who by default could only perform their duties by a job description, rules and regulations, memos or other documented materials. Persons in this group have a high compliance level and respect to protocol.
- **Absolute Compliance:** Persons in this group work with authority and have a higher responsibility; this group include persons such as managers, quality controllers, financiers or investors, government authorities. By default persons in this group must ensure that every detail is followed to the latter.

EU Standards and Certifications on cocoa exports from Ghana are effecting change in many areas in the commodity industry and have sustained a lasting relationship between Ghana and the European Union / European Free Trade Association. Creditworthiness, subsidies, grants and other financial aids are possible as a result of the long-term relationship it has built in the sector in respecting and complying with the appropriate protocols. The advantage to get loans and grants

at little interest rate, have made it possible for the sector to contribute immensely in societal development by building roads, schools, hospitals, mass-spraying of cocoa farms, student scholarship and other projects in rural and cocoa communities.

When all stakeholders and players in the commodity cycle adopt and implement EU standards and certifications in fullness, the objectives, goals and vision upon which the standards were built is achievable.

1.21 Personal Reflections

This topic is a new subject for me and I find it very important to study. The topic came to mind as a result of my interest in foreign trade especially when it has a direct relation with my home country. I was fortunate to work with persons who were entrusted with responsibilities to affect the trade of the commodity. By their recommendation and interest to know more about the topic, it was therefore a privilege to conduct the research especially as I am a student of both parts – Ghana and European Union.

The interest to conduct a meaningful research which would affect a positive change in the industry is an opportunity I dare not miss. I was given the necessary support whenever required from pre-knowledge to access to new information which was to make the study successful. The willingness of persons in the significant positions to contribute to the study motivated me to go ahead with the study.

Even though the topic has not been studied much, I am satisfied with my findings. The lack of past research data made it a little difficult in conducting this research and for that reason prolonged the deadline of the study. The selected literature pieces garnered the right information needed for the research; same applies to the availability of participants (to answer questions in time) who made this study a success. I admit that both theoretical and empirical study made it possible for me to draw final analysis even though the process was time consuming. I am satisfied with my report with the belief that it has accomplished the purpose – reliable and

valid. This study has improved upon my knowledge about the subject; I have gained useful experiences for future studies.

1.22 Recommendation for further Study

It is recommended that the findings of this research are applied by the necessary stakeholders and parties it benefits. The study focused on a number of objectives which suited the topic and for that reason the result gathered favours only those objectives. For the sake of reliability or validity of data, this research can be repeated over time to determine what has changed after this research was conducted compared to the time the new research is carried out.

Stakeholders, players, contributors should encourage a two-way feedback system to effect the change they expect to achieve by developing and maintaining a single platform to create awareness, educate and promote the knowledge of standards to new and existing contributors of the supply chain.

The study reveals other important areas which need to be researched to completely tackle the export deficit of cocoa beans. It would be of great advantage if the right measures are taken into consideration to sustain or improve cultivation, processing and trading of the commodity.

For consideration to furthering this research in the future, it is advisable to invest more time and funding to cover the topic on a very broad scope since this research was not able to cover much as a result of low resources – funding and human resource.

I find the topic very relevant to socio-economic development between Ghana, European Union and European Free Trade Association and for that, I hope to see further researches especially from the importer's perspective.

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APPENDICES

Quantitative Research Questionnaire for Participants

- What is the size of your firm?
 - 1-10
 - 11-20
 - 21-30
 - 31-40
 - 41->
- What industry do you belong to?
 - Import & Export
 - Banking and Finance
 - Education
 - Government
 - Agricultural
- How long have you been working in this industry?
 - 0-5yrs
 - 6-10yrs
 - 11-15yrs
 - 16-20yrs
 - 21->yrs
- How familiar are you with EU Standards and Certifications?
 - 5 = Excellent
 - 4= Very good
 - 3 = Good
 - 2 = Little knowledge
 - 1 = No knowledge
- Do you find EU Standards and Certifications relevant to cocoa exports from Ghana to the EU?
 - Yes

- No
- Does your job require that you at any point comply with EU Standards and certifications?
 - Yes
 - No
- It is easy to comply with EU Standards and Certifications in day-to-day transactions?

5 = Strongly Agree

4 = Agree

3 = neither agree nor disagree

2 = Disagree

1 = Strongly Disagree

- Did you have a pre-knowledge of EU standards in regards to your job?
 - Yes
 - No
- How were you able to conclude that it is pre-knowledge?
 - The requirement matched with current practice 0-50%
 - The requirement matched with current 51-100%
- Has compliance with EU Standards and Certification improved upon quality of activity?
 - Yes
 - No
- Has compliance with EU standards enabled you to avoid uncertainties?
 - Yes
 - No
- Do you find orientation very important and ensure that you prepare in advance for future shortcomings?
 - Yes

- No
- At what percentage are you able to effect EU standards in your duty/work?
 - 0-20%
 - 21-40%
 - 41-60%
 - 61-80%
 - 81-100%
- How long did it take you to adopt EU Standards and Certification in your working environment?
 - 4 = 19-more months
 - 3 = 13-18months
 - 2 = 7-12months
 - 1 = 0-6months
- Do you have challenges in compliance to EU Standards and Certification?
 - Yes
 - No
 - Maybe

Questionnaire Answers

- What is the size of your firm?
 - 1-10 29 prs
 - 11-20 17 prs
 - 21-30 13 prs
 - 31-40 45 prs
 - 41-> 16 prs
- What industry do you belong to?

- Import & Export 15 prs
- Banking and Finance 14 prs
- Education 30 prs
- Government 16 prs
- Agricultural 45 prs
- How long have you been working in this industry?
 - 0-5yrs 31 prs
 - 6-10yrs 10 prs
 - 11-15yrs 45 prs
 - 16-20yrs 19 prs
 - 21->yrs 15 prs
- How familiar are you with EU Standards and Certifications?
 - 5 = Excellent 45 prs
 - 4= Very good 16 prs
 - 3 = Good 30 prs
 - 2 = Little knowledge 15 prs
 - 1 = No knowledge 14 prs
- Do you find EU Standards and Certifications relevant to cocoa exports from Ghana to the EU?
 - Yes 115 prs
 - No 5 prs
- Does your job require that you at any point comply with EU Standards and certifications?
 - Yes 113 prs
 - No 7 prs
- It is easy to comply with EU Standards and Certifications in day-to-day transactions?
 - 5 = Strongly Agree 12 prs
 - 4 = Agree 16 prs

- | | |
|--------------------------------|--------|
| 3 = neither agree nor disagree | 63 prs |
| 2 = Disagree | 16 prs |
| 1= Strongly Disagree | 13 prs |
- Did you have a pre-knowledge of EU standards in regards to your job?

<input type="checkbox"/> Yes	86 prs (72%)
<input type="checkbox"/> No	34 prs (28%)
 - How were you able to conclude that it is pre-knowledge?

<input type="checkbox"/> The requirement matched with current practice 0-50%	48 prs
<input type="checkbox"/> The requirement matched with current 51-100%	72 prs
 - Has compliance with EU Standards and Certification improved upon quality of activity?

<input type="checkbox"/> Yes	91 prs (76%)
<input type="checkbox"/> No	29 prs (24%)
 - Has compliance with EU standards enabled you to avoid uncertainties?

<input type="checkbox"/> Yes	91 prs (76%)
<input type="checkbox"/> No	29 prs (24%)
 - Do find job orientation before commencing work relevant?

<input type="checkbox"/> Yes	41 prs (34%)
<input type="checkbox"/> No	79 prs (66%)
 - At what percentage are you able to effect EU standards in your duty/work?

<input type="checkbox"/> 0-20%	11 prs (9%)
<input type="checkbox"/> 21-40%	21 prs (18%)
<input type="checkbox"/> 41-60%	30 prs (25%)
<input type="checkbox"/> 61-80%	26 prs (22%)
<input type="checkbox"/> 81-100%	32 prs (27%)
 - Has compliance with EU Standards and Certification improved upon quality of activity?

<input type="checkbox"/> Yes	115 prs
<input type="checkbox"/> No	5 prs

- How long did it take you to adopt EU Standards and Certification in your working environment?

4 = 19> months 13 prs

3 = 13-18months 17 prs

2 = 7-12months 63 prs

1 = 0-6months 27 prs

- Do you have challenges in compliance to EU Standards and Certification?

Yes 72 prs

No 35 prs

Maybe 13 prs

Qualitative Research Questions

- Age, Name, Profession, Position, Employment Duration, Group Size
- How familiar are you to EU Standards and Certification?
- Do you think pre-knowledge affects compliance with EU Standards?
- Are EU Standards relevant to you?
- Has compliance with EU Standards guaranteed buyer confidence in cocoa beans?
- Do you agree that standards should be a prerequisite for exporting partners? If yes why?
- Do you admit that exporters should comply fully with EU Standards and Certifications in relation to cocoa beans exported to the EU/EFTA region?
- How has compliance with EU Standards and Certifications affected you?
- Do you approve of a well documented guideline in your workplace for achieving the required EU Standards concerning cocoa beans? If yes, how?

- Have you encountered challenges in compliance to EU Standards and Certifications? If yes, what are they?
- Have you benefited positively in compliance to EU Standards and Certifications? If yes, how?
- Would you say that EU Standards and Certification gives a sense of direction for exporting partners? If yes, how do you relate?

Interviews:

Respondent 1. Head of Cocoa Farmers Union, Tarkwa. Place and date of interview. Accra, 08.01.2016 at 15.00-16:30

Respondent 2. Customs Officer, Ghana Revenue Authority, Tema. Place and date of interview. Skype, 10.02.2016 at 11.00-12:30

Respondent 3. Fleet Manager, XXX Ltd., Accra. Place and date of interview. Skype, 18.01.2016 at 14.00-15:00

Respondent 4. Manager, Cocoa Marketing Board – Ghana, Accra. Place and date of interview. Accra, 07.01.2016 at 10:00-11:30

Respondent 5. Officer, Ghana Standard Authority, Accra. Place and date of interview. Accra, 04.03.2016 at 11.30-13:00

Respondent 6. Freight Forwarder, XXX Ltd., Tema. Place and date of interview. Skype, 12.02.2016 at 15.00-16:30