# FAIR VALUE IMPLEMENTATION CHALLENGES FACING SMALL AND MEDIUM-SIZED ENTITIES IN THE AGRICULTURAL SECTOR IN GHANA.

by

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**Dedications**

This study is dedicated to my country Ghana, my dear children, Genius Otumfour Agyemang-Prempeh, Cassandra Nanahemaa Agyemang-Prempeh and Shanetta Obaasima Agyemang-Prempeh and to all the dreamers of agricultural accounting. Keep dreaming, the future of Ghana is agricultural accounting and modernisation of agriculture. We are encouraged to see this future come through.

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## Acknowledgements

I am highly indebted to the almighty God for His guidance and protection throughout my studies from the lower level to this higher level. "Trust in the Lord with all your heart. Lean not on your own understanding, in all your ways acknowledge Him, and He will direct your path."(Proverbs 3:5-6). "Behold, I am doing something new! It's already happening; don't you recognise it? I will clear a way in the desert. I will make rivers on dry land." (Isaiah 43:19)."Do not be anxious about anything, but in everything, by prayer and petition, with thanksgiving, present your requests to God."(Philippians 4:6). I presented my request to God to give me understanding; clear the way for me to finish this course, and with trust and hard work, God has made it happen.

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Obaasima Agyemang-Prempeh for their prayers and encouragement throughout this study.

**Declaration**

Student Number 49919180

I, Joseph Kwasi Agyemang, declare that **Fair Value Implementation Challenges Facing Small and Medium-Sized Entities in the Agricultural Sector in Ghana,** is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of a complete list of references.

J K Agyemang                                    Date 14th December 2016

**Summary**

In recent times, the significance of fair value in financial reporting is gaining momentum and current debates are moving in the trend of full fair value reporting. Small and medium-sized entities are not let off in this instance. The move to new reporting standards results in numerous challenges for diverse interest groups such as auditors, preparers and regulators. The main objective of the study was to establish the fair value implementation challenges facing SMEs in the agricultural sector in Ghana.

This study established that, in Ghana, commodity markets do not exist and that farmers do not have access to market information. The study also established that there is high IFRS implementation cost, inadequate training and education for preparers of financial statements and academic education not focusing on agricultural accounting. In light of these challenges, the study recommends improving capacity building through user training and education and establishment of commodity markets.

**Key words:** Agricultural sector, small and medium-sized entities, fair value, fair value measurement.

# CHAPTER 1

## INTRODUCTION

### 1.1 Background information

The agricultural sector is considered to be the most significant sector in the economy of Ghana because of its contribution to Gross Domestic Product (GDP), foreign exchange income and employment. This is evident as the agricultural sector employs about 55 per cent of the labour force and contributes about 35 per cent to GDP (Republic of Ghana, 2012). The agricultural sector also contributes almost 45 per cent of all export earnings and 12 per cent to Ghana's tax revenue. Additionally, the agricultural sector is the main source of raw materials for manufacturing and, ultimately, for the agriculturally dependent rural households, which form about 80 per cent of the population (Republic of Ghana, 2009).

In 1945 the Food and Agriculture Organization (FAO) was introduced by the government of Ghana to promote and support agribusiness development with a particular focus on strengthening farm-agribusiness collaboration. This was also to help change the agricultural sector in order to speed up efficiency, raise income and job creation opportunities, advance food security and increase competitiveness in regional and international trade (FAO, 2004).

In addition, Ghana signed a Millennium Challenge Corporation Contract in 2006 with the intention to support the transformation of the agricultural sector of Ghana (Republic of Ghana GSS, 2012) and to improve the agricultural sector's contribution to GDP. Ghana's GDP has reached approximately 70 billion Ghana cedis in 2012 from a low record of 30 billion Ghana cedis recorded in 2008 (Republic of Ghana GSS, 2012). However, the Ghana Statistical Service (GSS) indicated a lower rate of growth in the agricultural sector from 14.4 per cent to 7.1 per cent in 2012 but emphasised the sector is the engine of Ghana's economy (Republic of Ghana GSS, 2012).

Identifying some of the challenges of earlier periods, as fixed in Ghana's *Vision 2020* (Republic of Ghana, 2007), the Government of Ghana has adopted a modern approach of public-private partnerships to be able to augment private investment in the agricultural

sector. The new move concentrates on improving the role of mercantile agriculture and intensifying agricultural value chains. Under this programme the Government of Ghana is in quest of enlarging and deepening private sector investment in unutilised land to elevate export revenues, augment productivity, and improve marketing of processing of food staples for local consumption (Republic of Ghana, 2007).

In spite of the contribution of the agricultural sector to the economic development of Ghana, the sector encounters several challenges. Some of these challenges are exorbitant transport cost and difficulty in securing loans. Others are infrastructural problems such as unavailability of irrigation expansion and inadequate scarce storage facilities. In addition, there are issues related to land acquisition and tenure as well as social and environmental problems (Republic of Ghana, 2007). The country's most important export products consist of pineapples, timber and cocoa, whereas the up-and-coming products in the manufacturing sector comprise fruits, cassava and cocoa by-products (Republic of Ghana, 2013a). Table 1.1 shows the performance of the agricultural sub-sectors in Ghana.

Table 1.1 Agricultural subsectors by Gross Domestic Product (GDP %)

| Agricultural sub-sectors | 2006 | 2007 | 2008 | 2009 | 2010 |
|---|---|---|---|---|---|
| Fisheries | 7.5% | 7.2% | 8.1% | 7.1% | 7.3% |
| Livestock | 7.5% | 7.2% | 6.3% | 5.9% | 6.1% |
| Crops | 63.8% | 63.8% | 67.1% | 68.8% | 66.2% |
| Cocoa | 9.0% | 8.5% | 7.5% | 7.4% | 7.3% |
| Forestry | 12.3% | 13.2% | 11.1% | 11.2% | 12.2% |

*Source:* Republic of Ghana (2010:35)

The crops sub-sector showed a significant growth (1.7%) from 2008 to 2009. The livestock sub-sector also grew in 2010 as compared to 2009. The forestry sub-sector experienced a significant decline from 2007 to 2009 but there was a 1% increase from 2009 to 2010. There was also a significant growth of 0.9% of the fisheries sub-sector from 2007 to 2008 and 0.2% from 2009 to 2010.

Table 1.2 shows the growth performance of the agricultural sub-sectors

**Table 1.2: Agriculture growth performance (per cent)**

|                 | **2014** | **2015\*** | **2016\*\*** |
|-----------------|----------|------------|--------------|
| **Agriculture** | **4.6**  | **2.5**    | **3.6**      |
| Crops           | 5.7      | 2.0        | 3.3          |
| Cocoa           | 4.3      | (2.3)      | 2.5          |
| Livestock       | 5.3      | 5.3        | 5.3          |
| Forestry        | 3.8      | 3.9        | 4.1          |
| Fishing         | (5.6)    | 1.3        | 4.4          |

Source: Republic of Ghana (2017:28)

All the subsectors in the agriculture sector recorded positive growth rates, with the livestock and fishing subsectors being the best growth performers, as indicated by table 1.2. The crops subsector grew by 3.3% on provisional basis, an improvement over the 2% recorded in 2015. Cocoa, which falls under the crops subsector, is estimated to have grown by 2.5%; this is an improvement over the contraction of negative 2.3% it registered in 2015.

### 1.1.1 Accounting for biological assets

Despite the relative importance of agriculture as a primary economic activity, there were no "industry specific" international accounting standards until 2001. IAS 41 Agriculture (IASB, 2009a:2345) was issued in February 2001. It was projected to include periods beginning from January 1, 2003 in prescribing accounting standards for agricultural activities – the management of the biological transformation of biological assets (living plants and animals) into agricultural produce. In IAS 41 Agriculture, a key reform introduced is the requirement of the fair valuation of biological assets "from initial recognition up to the point of harvest" (IASB, 2009a:2348).

In a study carried out to compare the application of the Farm Accountancy Data Network (FADN) with Exposure Draft 65 Agriculture, Argilés and Slof (2000:2) noted that there was no single standard for valuation of biological assets. In Australia, a comprehensive agricultural accounting framework was introduced with the issue of Australian Accounting Standards Board (AASB) 1037, *Self-Generating and Regenerating Assets,* which became effective in 2001 (AASB, 1998). This accounting regulation was opposed as a result of the

difficulty of the practical application of net market value to plantations and vines which are permanently attached to land. This resistance resulted in the AASB suspending implementation by one year from June 2000 to June 2001 (Williams & Wilmshurst, 2008:4).

In the United States of America, the only industry specific guidance for agricultural issues is the *Statement of Position (SOP) 85-3, Accounting by Agricultural Producers and Agricultural Cooperatives*, which was issued by the American Institute of Certified Public Accountants (AICPA) in April, 1985 (Jarnagin, 2008:1268). This statement prescribes the accounting treatment for inventories, development costs of land, perennial crops, and breeding livestock, and, in the main, advocates historical cost as an appropriate asset measurement basis except in rare circumstances in which realisable value may be considered as an alternative.

According to the Institute of Chartered Accountants in England and Wales (ICAEW) (2007b), companies in the United Kingdom (UK) were allowed to report under either Generally Accepted Accounting Principles (GAAP) or International Financial Reporting Standards (IFRS). According to the Financial Reporting Advisory Board (FRAB), there was no equivalent standard in UK GAAP for the accounting treatment related to agricultural activity (FRAB, 2007:5).

As stated by the Financial Standards Foundation (FSF) in Kenya, Kenya Accounting Standards (KAS) did not provide guidance for the reporting of biological assets (FSF, 2009). The small-scale commercial farmers, in terms of whom surpluses only are sold, employ mainly a cash-basis of accounting (FSF, 2009).

Until the implementation of IFRS, the Ghana National Accounting Standards (GNAS) had no comprehensive direction on the recognition and measurement of biological assets. The discovery of bio-technology and the prologue of modern farming methods have ended up in the conversion of small-scale farming to commercial farming. The strategic plan of the Government of Ghana is concentrating on farming as a core economic

mainstay in order to recognise its vision. Ghana has targeted to improve an innovative, commercially-oriented, and modern agricultural sector (Republic of Ghana, 2013b). It is necessary that such inventions in the agricultural sector remain focused with global standards of reporting, which are to a large extent influenced by the work of the International Accounting Standard Board (IASB) (IASB, 2009b).

IFRS 13 fair value measurement presents a structure full of principles for measuring fair value in IFRS. This takes into consideration several key theories which are made up of unit of account; highest and best use; valuation premise; exit price; principal market; assumptions of market participant and the fair value hierarchy. In addition to IFRS 13, accounting for biological assets, as known in the accounting parlance, is regulated by the International Accounting Standard (IAS 41) Agriculture. The aim of IAS 41 is to set the standard for the recording of biological assets in the financial statements and the reporting on these biological assets (disclosure) (IASB, 2011e: par 1). As accounting for biological assets are fairly new, the preparers of financial statements as well as regulators of IFRS in Ghana are likely to experience implementation challenges. Therefore, there is a need to investigate the predicaments of the implementation of fair value accounting in the agricultural sector in Ghana in order to come up with guidelines for successful implementation.

### 1.1.2 IFRS for SMEs
As the activities of businesses extend across national boundaries, it became indispensable to develop international financial reporting standards to match up the inter firms results in different countries. This is because a country with disparity in reporting standards had a momentous discrepancy on the outcomes of financial reporting. Between 1973 and 2001, the International Accounting Standards Committee (IASC) issued IASs (IASC, 2001). In April 2001 the IASB adopted all IAS and continued their development of IFRS (IASC, 2001). Many of the standards constituting part of IFRS are recognised by the older name of IAS. In spite of these, Statements of Standard Accounting Practices (SSAPs), IASs and the most recent IFRSs are expected to remain beneficial to users, preparers and auditors of accounting statements for many years to come. Now, the focal point is on the development of standards for financial reporting to meet what different

entities are demanding (Cobbold, Akobour-Debrah, & Kommey, 2008). This thought, known as differential reporting, has attracted the attention of numerous stakeholders in the accounting profession despite the fact that a few of them are not in agreement with the concept. This concept has brought about the introduction of an exposure draft of the Financial Reporting Standards for SMEs (FRSSE) by the IASB. Some countries previously had reporting standards in place, developed exclusively for SMEs, similar to the Financial Reporting Standards for SMEs by the United Kingdom and the SME-Financial Reporting Framework by Hong-Kong (Cobbold et al., 2008).

IFRS for Small and Medium-sized Entities (IFRS for SMEs) was issued in July 2009 by IASB. However, in 2015, IASB issued a revised standard on IFRS for SMEs (IASB, 2015). Section 34 (1) of this standard outlines the application of fair value by small and medium-sized entities engaged in agricultural activities by indicating that every entity shall establish, for every biological asset, whether that biological asset's fair value is determinable devoid of unjustifiable cost or effort by applying the fair value model in paragraphs 34.4-34.10 of IFRS for SMEs (IASB, 2015). This IFRS for SMEs (IASB, 2015) is a standalone document and requires entities engaged in agricultural activities to determine without undue cost or effort, for each of its biological assets, where the fair value is willingly determinable. Where the fair value is willingly determinable the entity must use the fair value model. In cases where the fair value is not readily determinable, the cost model must be used by the entity for the relevant biological asset.

IFRS for SMEs defines SMEs as those entities that publish financial statements even though such entities do not have public accountability (IASB, 2012a: par 1.2-1.6). However, in Ghana a variety of explanations are assigned to Micro, Small and Medium scale enterprises but the commonly used criterion is the number of employees of the enterprise (Kayanula & Quartey, 2000).

### 1.1.3 Ghana National Accounting Standards (GNAS)
In terms of any other fixed assets, biological assets were recognised and consequently depreciated. Unlike GNAS, IAS 41 stipulates the recognition and measurement criteria of

biological assets. This standard (IASB, 2013) spells out in detail how companies engaging in agricultural activities should measure their assets. Companies in the various industries engaged in the cultivation of farm produce e.g. timber; palm trees, sugar cane, dairy products, wine production, and meat production should measure their assets in line with IAS 41. The standard mentions that companies should measure their biological assets at fair value and any resulting changes in fair values less estimated cost at the point of sale are recognised in the statement of comprehensive income (IASB, 2013).

The Institute of Charted Accountants Ghana's (ICAG) adoption of IFRS was based on a study conducted by the World Bank in 2004. This study was accessible in a 'Report on Observance of Standards and Codes' (ROSC). The study aimed to "assess the weaknesses and strengths of the accounting and auditing requirements, and to evaluate the reporting requirements against actual practices" (ROSC, 2004:194). The World Bank used the IFRS and International Standards on Auditing as the yardsticks for gauging national standards. The Report on the Observance of Standards and Codes published by the World Bank in June, 2004 was the outcome of the assessment of the Ghanaian accounting and auditing standards. However, the World Bank in December, 2010, published another ROSC report on 'Corporate Governance Country Assessment on Ghana'. This report enclosed guiding principles for the improvement of the financial reporting structure in Ghana.

The ICAG, according to the World Bank, has made an effort to raise awareness on the need to apply IFRS, but has done less to build accountant and auditor capacity. It does not review the quality of reports or their compliance with IFRS, and peer review is not established. The nonexistence of a national standard based on IAS 41, is significant in agriculture-dominant Ghana (ROSC, 2010). In Africa including Ghana, almost 15 countries currently have converged to or have fully adopted the IFRS as a standard for annual reports preparation (World Bank Report, 2011). All firms that are listed on the Ghana Stock Exchange are obliged to prepare accounts using IFRS. ICAG recommended that all SMEs and unlisted companies also prepare both income and position statements using IFRS for SMEs and IFRS respectively (ICAG, 2010).

Through the examination of financial statements and interviewing some of the accountants who prepare financial reports for SMEs in the agricultural sector in Ghana, it was ascertained that almost all the SMEs in the agricultural sector have not implemented the accounting standards (IAS 41; IFRS 13) for reporting of biological assets. IAS 41 or IFRS 13 has not been implemented on adoption as a standardised basis to account for biological assets in the agricultural sector in Ghana. As it stands now, the financial information of SMEs in the agricultural sector in Ghana cannot be compared with international competitors because they are not prepared on a homogeneous basis. Madawaki (2012:152) also mentions that the successful adoption and implementation of IFRS will remain a fantasy in any country, from which Ghana is not exempted. Nana Sackey, Deloitte Country Managing Partner, stated in a seminar organised by Deloitte to engage SMEs in global financial reporting standards in Kumasi on February 11, 2013 that SMEs in Ghana should clearly identify and contend with the problems of adopting and implementing the new set of standards for the preparation of financial statements (Domfeh, 2013). He recognised the fact that SMEs that will adopt and implement IFRS for SMEs would face some challenges.

Although agriculture is Ghana's most important economic sector employing more than half the population, agricultural accounting in Ghana is an unexploited area to boost investment opportunities. It is clearly believed that the preparers of financial statements in the agricultural sector of Ghana will face some challenges in the implementation and application of IAS 41. On the other hand, Ghana National Accounting Standard and the Ghana Companies Code 1963 (Act 179), which serve as a yardstick for the preparation and treatment of financial transactions in the financial statements, did not provide guidance for the treatment of biological assets in the financial reports. However, now that Ghana has made mandatory and optional adoption of IFRS/ IAS for listed and non-listed SMEs operating in the agricultural sector, how should the implementation of IAS 41 be approached?

## 1.2 Research problem and questions

This study intended to ascertain the implementation challenges of fair value reporting of biological assets faced by SMEs in the agricultural sector of Ghana. The aim of this

investigation was to ascertain possible implementation challenges in order to suggest implementation guidance for IAS 41. Implementation guidance is of particular importance when international standards are applied for the first time. The challenges were examined by taking into consideration IAS 41 and IFRS 13.

This study set out to answer the following research questions in respect of fair value implementing challenges of IAS 41/IFRS 13 in the agricultural sector of Ghana:

*(i) What challenges do preparers of financial statements and the regulators of IFRS face in the implementation of fair value in the agricultural sector?*

*(ii) In which manner has the fair value implementation challenges affected the quality of financial reporting?*

## 1.3 Significance of the study

The study was therefore set to reveal the challenges of fair value reporting faced by small and medium-sized entities in the agricultural sector of Ghana. Furthermore, the study also intended to show the viability of implementing IAS 41 in the agricultural sector. The study also proposed to portray how these challenges affect the quality of financial reporting. More so, the study intended to propose possible improvements in order to improve the comparability, relevance and reliability of financial statements. The recommendation had to be in line with international reporting standards as well as suitable measures for simplifying the financial reporting and for harmonisation. This might help to triumph over such challenges in a cost effective way. In addition, this study intended to present an orientation for those who prepare the financial statements for small and medium-sized entities in the agricultural sector. The study proposed a platform to reduce the operational expenses across boundaries by eradicating the call for additional information from companies in Ghana; uncomplicated guidelines of fiscal information in the country; and improvement in the knowledge of universal financial reporting standards in universities and polytechnics. Again, this study was important to the Ghanaian economy as the implementation of IFRS would improve transparency in the conduct of business in the private and public sectors of the economy especially in the agricultural sector. Other developing nations which are yet to adopt the policy may also find this study important, in

spite of lack of expertise and technology as well as environmental challenges existing in their unique circumstances, than in more advanced nations as IFRS is a globalised and converged policy across the globe. Additionally, this study intended to discover information gaps and propose areas for further studies.

## 1.4 Objectives of the study

The main objective of the study was to ascertain the implementation challenges of fair value reporting of biological assets by SMEs in the agricultural sector of Ghana. Nowadays, the relevance of fair value in financial reporting is gaining impetus and recent debates are moving in the trend of full fair value reporting. Small and medium-sized entities are not let off in this instance. Fair value accounting in the agricultural sector in Ghana is a new concept because the previous GNAS did not make provision for the treatment of biological assets. To be able to analyse the implementation challenges connected with fair value reporting of biological assets in line with small and medium-sized entities in the agricultural sector, the specific objectives of the study were to:

*(i) Identify the challenges of implementing IAS 41/IFRS 13 in the agricultural sector of Ghana*

*(ii) Determine how the challenges affect the quality of financial reporting in Ghana*

*(iii) Identify the level of knowledge of preparers of IFRS / IAS procedures and implementation of the standards in Ghana.*

*(iv) Determine the level of accounting education and training on the practical implementation of IFRS 13/ IAS 41in Ghana.*

*(v) Identify the effect of existing laws on the smooth implementation of IFRS 13/ IAS 41 in Ghana, and*

*(vi) Determine economic challenges in Ghana relating to fair value implementation in the agricultural sector.*

## 1.5 Scope of the study

Ghana, officially called the Republic of Ghana, is one of the countries in West Africa which has a constitutional democracy. Ghana shares a border with Togo in the east, Ivory Coast in the west, Burkina Faso in the north and has the Gulf of Guinea in the south. Ghana is roughly surrounded by land from three sides. Ghana has a coastline of 539 km. Ghana is covered by a total territorial area of 238,533 sq. km. Ghana is the 82nd country of the world. It is also situated in close proximity to the equator, located to the north of it. Therefore, Ghana predominantly has a steamy warm climate. Ghana is 4° to 12°N latitudes and 4°W to 2°E longitudes. The prime meridian passes through the town of Tema in Ghana. The capital of Ghana is Accra. Lake Volta, which is the world's biggest artificial lake by surface area, is found in Ghana. Ghana has a wide variety of wildlife and natural resources which serve as tourist centres. The large quantity of natural resources in the country has contributed to its growing economic development. There are many SMEs scattered across Ghana. This study was restricted to a selected number of entities in the Ashanti and the Western Regions of Ghana (refer figure 1.1). As a result of the wide spread occurrence of SMEs, this study cannot be directly generalised to include all SMEs in Ghana. Though, there are ten regions in Ghana, it is noted that these two regions (Ashanti and the Western Region) are dominated by small and medium scale farming. Ashanti is considered as an administrative region in Ghana (James, 2008). The region is located in the central part of Ghana. It is found amid longitudes 0.15W and 2.25W, and latitudes 5.50N and 7.46N. The region shares borders with four of the ten regions, Eastern Region in the east, Brong-Ahafo in the north, Western Region in the South and west Central region in the south. On the other hand, Western Region comprises an area of 2, 3921 km², constituting just about 10 per cent of the total land area of Ghana. Western Region is surrounded by the high forest zone of Ghana, and located in the equatorial climatic region that is characterised by restrained temperatures. The region has a regular rainfall of 1,600mm annually. It shares a boundary with the Central and Ashanti and Brong-Ahafo Regions, in the eastern and northern parts of Ghana respectively. The region also shares borders with Ivory Coast and the Gulf of Guinea in the western and southern part of Ghana respectively (James, 2008).

The map of Ghana (refer to figure 1.1) shows the two regions (Ashanti and Western) which were included in this study.

**Figure 1.1: Map of Ghana**



Source: Adapted from: James (2008: 27)

Therefore, the findings and opinions of the selected SMEs in these regions are representative of the implementation challenges of fair value in the agricultural sector for SMEs in Ghana. Micro-sized agricultural entities were excluded in this study because such entities are owner-managed and are unwilling to disclose their financial statements for performance assessment.

## 1.6 Explanation of key terms

**Agricultural activity**: In IAS 41, agricultural activity is described as the conversion of biological assets subject to sales or recycling to agricultural products or different biological assets and the management of harvest operations by a corporation (IASB, 2013b).

**SMEs:** SMEs are those entities that publish financial statements even though such entities do not have public accountability (IASB, 2013b). Small enterprises are business

units that employ between 10 and 29 employees while medium-sized enterprises are those that employ between 29 and 50 people (Osei, Baah-Nuakoh, Tutu & Sowa, 1993:221).

**Biological asset:** "Biological assets are living plants or animals in agricultural activity whose biological transformation (development, degeneration, and reproduction) and harvest is managed by an entity for sale or for conversion into agricultural produce or into additional biological assets; and agricultural produce up to the point of harvest" (IASB, 2013b sec 34).

**Biotechnology:** The United Nations Convention on Biological Diversity (FAO, 2000: 29), defines biotechnology as "any technological application that uses biological systems, dead organisms, or derivatives thereof, to make or modify products or processes for specific use".

**Fair value**: IFRS 13 defines Fair Value as the charge received from the sale of an asset or an amount paid to transfer a liability in an orderly transaction between market participants at the measurement date (IFRS 13.9; IASB, 2013b).

## 1.7 Research methodology

This study will involve limited empirical research. The empirical research involved field research to collect data from individuals in charge of the preparation of financial statements (refer Appendix A) and from regulatory bodies of financial reporting of SMEs in the agricultural sector in Ghana (refer Appendix B). SMEs operating under the agricultural sector in Ghana are not listed. As a result of this, a purposive sampling technique was used in the administration of questionnaires to each respondent that was identified (refer Appendixes A and B). There were two groups of respondents as well as two questionnaires. Each respondent was required to answer a set of structured questions. The study used both closed-ended, structured questions and open-ended questions. A structured or closed response questionnaire specifies alternatives for the respondents. The study adapted one questionnaire previously used in a study conducted

in Kenya (Maina, 2010). The target population of this study comprises of owners/managers and accountants of SMEs in the Ashanti and Western Regions of Ghana operating in the agricultural sector. The Ashanti and Western Regions of Ghana were considered because they are the hub of agricultural activities.

This study considered those entities that publish financial statements even though such entities do not have public accountability. The study also considered the regulatory bodies with respect to financial reporting in Ghana like the Institute of Chartered Accountants Ghana (ICAG), Ghana Stock Exchange (GSE), Chartered Accountants in audit firms, Stock Exchange Commission (SEC), Ghana Revenue Authority (GRA) and Ghana Audit Service (GAS). A sample size of 120 was considered. The Statistical Package for the Social Sciences (SPSS) was used to organise and process the data for analysis. Frequency distribution tables, charts and graphs were used to analyse the data.

## 1.8 Outline of the study

The remainder of this dissertation is organised into chapters as outlined below:

Chapter two deals with the literature review. It has subsections relating to the research objectives. The first section defines SMEs and also identifies the users of the financial statements of SMEs and their information requirements. This chapter therefore discusses IFRS for SMEs in the agricultural sector. The chapter also focuses on the brief history of IFRS and how the application of IFRS 13 and IAS 41 affects the quality of financial statements; IFRS implementation challenges facing countries in Africa like Kenya, South Africa and Nigeria that have implemented IFRS. In addition, the chapter focuses on the need for implementation and the application of accounting standards. The next subsection reviews the historical perspective of fair value accounting as well as the meaning and use of the fair value measurement basis for financial reporting. The chapter also focuses on various valuation methods which may be used for biological assets. Furthermore, the chapter conceptualises fair value implementation and its challenges facing the agricultural sector in and outside Ghana.

Chapter three describes the population used in the study. It also highlights the challenges encountered in the definition of such a population. In addition, explanation of

the sample design and the sampling techniques are captured in the study. The chapter also explains the method of data collection used and the questionnaire design. The questionnaire consists of structured questions so as to get standard responses from the preparers of the relevant financial statements and regulatory bodies of financial reporting in respect of their views on IAS 41, IFRS 13, and potential implementation challenges in applying the fair value concept. For the purpose of this study both quantitative and qualitative methods were used to analyse the findings and to draw conclusions. To have a reliable study, it relied on different and prominent authors and researchers of accounting in the review of literature. Different conclusions made by a range of studies were cautiously examined and compared. The questionnaire was pretested in order to reduce likely errors.

Chapter four presents the research findings, including an explanation to the coding of the data ascertained as groundwork for the analysis to follow. Charts and statistical techniques are used for the analysis. The chapter concludes by collating the views obtained in order to draw a conclusion and to make recommendations.

Chapter five sums up the study, draw conclusions, and give recommendations and suggested areas of further research. This dissertation outline is illustrated in figure 1.2.

**Figure 1.2: Dissertation outline**

VISUAL OVERVIEW OF OUTLINE OF

Chapter 1
Introduction

Chapter 2
Literature review

| Chapter 3 Research design | Chapter 4 Data analysis and presentation | Chapter 5 Summary, conclusions and recommendations |
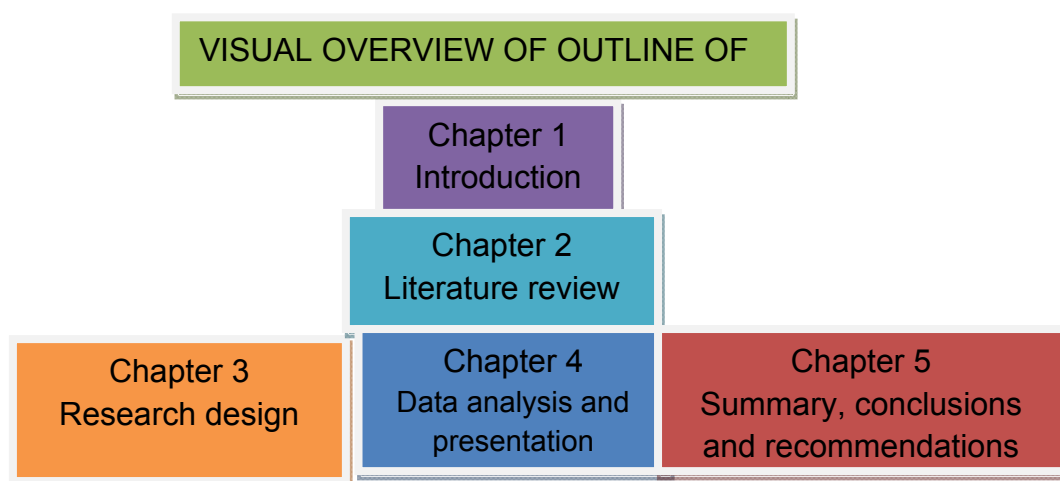
## 1.9 List of abbreviations

AASB: Australian Accounting Standards Board

ACCA: Association of Certified Chartered Accountants

AICPA: American Institute of Certified Public Accountants

CESR: Committee of European Securities Regulations

ETI: Ecobank Transnational Incorporated

FAS: Financial Accounting Standards

FASB: Financial Accounting Standards Board

FAO: Food and Agriculture Organization

FRSSE: Financial Reporting Standards for SMEs

FADN: Farm Accountancy Data Network

FRAB: Financial Reporting Advisory Board

FSF: Financial Standards Foundation

GAAP: Generally Accepted Accounting Principles

GAS: Ghana Audit Service

GCX: Ghana Commodity Exchange

GDP: Gross Domestic Product

GNAS: Ghana National Accounting Standards

GRA: Ghana Revenue Authority

GSE: Ghana Stock Exchange

IAS: International Accounting Standards

IASB: International Accounting Standards Board

IASC: International Accounting Standards Committee

ICAG: Institute of Charted Accountants Ghana

ICT: Information Communication Technology

IFRS: International Financial Reporting Standards

KAS: Kenya Accounting Standards

NBSSI: National Board for Small Scale Industries

Par: Paragraph

POB: Professional Oversight Board

PwC: PricewaterhouseCoopers

ROSC: Report on Observance of Standards and Codes

SEC: Stock Exchange Commission

SMEs: Small and Medium-sized Entities

SOP: Statement of Position

SPSS: Statistical Package for the Social Sciences

UNCTAD: United Nations Conference on Trade and Development

WRS: Warehouse Receipt System

# CHAPTER 2
# LITERATURE REVIEW

## 2.1 Introduction

This chapter introduces literature related to the present study. The literature was reviewed in line with the stated objectives of this Research. The first section defines Small and Medium-sized Entities (SMEs) and also identifies the users of SMEs' financial statements and their information requirements. This chapter therefore discusses International Financial Reporting Standards for Small and Medium-sized Entities (IFRS for SMEs) in the agricultural sector. The chapter also focuses on the brief history of IFRS and how the application of IFRS 13 or IAS 41 affects the quality of financial statements; IFRS implementation challenges facing countries in Africa like Kenya, South Africa and Nigeria that have implemented IFRS.

Additionally, the chapter focuses on the need for implementation and the application of accounting standards. The next subsection reviews the historical perspective of fair value accounting as well as the meaning and use of the fair value measurement basis for financial reporting. Furthermore the chapter conceptualises fair value implementation and its challenges facing the agricultural sector in and outside Ghana. The outline of this chapter is as follows:

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|---|---|---|---|
| 2.1 Introduction | 2.2 Nature of Small and Medium-Sized Entities (SMEs) | 2.3 International Financial Reporting Standards (IFRS) | 2.4 IFRS for Small and Medium-Sized Entities in the agricultural |
| 2.5 Effects of IFRS adoption on financial statements | 2.6 Advantages in adopting International Financial Reporting Standards (IFRS) | 2.7 Disadvantages and costs of IFRS | 2.8 Challenges of IFRS implementation |
| 2.9 Historical background of the use of fair value accounting | 2.10 IAS 41 and IFRS 13 | 2.11 Fair value implementation challenges in the agricultural sector | 2.12 Summary and conclusions |

**Figure 2.1: Outline of chapter 2**
**Source: Author**

## 2.2 Nature of small and medium-sized entities

In the economy of every country, SMEs play a very important role and their growth results in positive impact to the overall economies. The European Commission report indicates that SMEs represent 99% all the entities operating in Europe (European Commission, 2010:2). This has been imperative for both the economic and social developments in Europe. SMEs have been categorised into three diverse groups of micro, small and medium-sized enterprises on the criterion of ceilings defined by the European Commission for the number of employees and either of revenues from takings or the sum of position statement (European Commission, 2010:2). In Europe, micro-enterprises in the sphere of SMEs are taken to be the pillars of the European economy, and are defined

as those with fewer than 10 employees. In reference to the statistics of the European Commission, 67% of the jobs in the private sector in Europe are provided by SMEs, which constitutes a pillar of the country's economy (European Commission, 2008: 7). Accounting regulations of SMEs in Europe is different from those of developing countries, and these accounting standards are followed by the SMEs on a national level.

According to the Association of Certified Chartered Accountants (ACCA) (2008), an important number of SMEs in developing countries remain in traditional activities, normally with little production of products that are of low superiority and serving small, restricted markets. This means that most SMEs in the agricultural sector, even though they contribute immensely to the socioeconomic development of every country, still use cutlasses and hoes in farming. ACCA (2008) mentions that SMEs are barely managing to survive, and they have little or no technological dynamism. Only a few of such firms, "graduate" into large-sized SMEs or embrace modern technologies. Even as the world responds positively to the IFRS for SMEs, the question remains as to whether SMEs should prepare financial statements.

The National Board for Small Scale Industries (NBSSI, 1990) has defined SMEs in Ghana by using the criteria of fixed assets together with the number of employees. It explains that a small-scale enterprise is a firm that does not employ more than 29 workers whilst its plant and machinery (not including buildings, land and vehicles) is not valued at more than 10 million Ghana cedis. However, for the purpose of this study, the definition given by IFRS for SMEs was applied (refer par. 1.6). This was linked to SMEs in the agricultural sector in Ghana that publishes financial statements but do not have public accountability.

### 2.2.1 IFRS for SMEs

Numerous companies, regardless how big they are, are bound by the constitutional rules of the specific country within which they function to prepare financial reports in line with a specified set of accounting principles. There has been a lot of progress debate that every country should have one set of accounting standards for all businesses. These talks and debates ended in the pursuit of IASB for a set of standards for diverse entities in respect of the size criterion defined (Pacter, 2004). It was during the 1990s that the initial proposal

with reference to impediment of standards issued by the IASC board and faced by less developed countries was reported by a member of the Jordanian delegation to IASC. Even though this proposal was not followed, it led to a new set of standards for SMEs initiated by IASC, which was then replaced by IASB. In Ghana, the Institute of Chartered Accountants Ghana (ICAG) is in charge of issuing standards for listed and unlisted companies. Owing to the broad spectrum of SMEs and common standards for SMEs worldwide, the IASB issued an International Financial Reporting Standard (IFRS), intended to apply to small and medium-sized entities (SMEs), on July 9, 2009 (IASB, 2010).

The IASB concluded that the users of SMEs' financial statements are different from those of the users of public entities' financial statements (Rundfelt, 2007:1). In 2001, the IASB officially commenced to build up accounting standards appropriate for SMEs, taking the budding economies as a focal point. Therefore, a discussion paper was formulated in 2004 with the title of "Preliminary Views on Accounting Standards for SMEs", and, comments were invited on this discussion paper from around the world. Recommendation and emphasis were directed to the core rudiments of any accounting standards. This included recognition, measurement and the presentation and disclosure of financial statements.

The IASB published the first exposure draft of IFRS for SMEs in February 2007. The main aim of this publication was to make available a simple, easy to understand set of accounting principles for unlisted companies, based on full IFRS. The IASB conducted a field test as a result of this exposure draft with a sample size of 116 small entities from 20 different countries. Comments and reviews of the exposure draft, and results from field tests made it easier for the IASB to further enhance and simplify the accounting standards for SMEs. Finally, the IASB launched the official and final version of IFRS for SMEs on the 9th of July, 2009 (IASB, 2009: 6-12). Deloitte and Touche (2009a) explains that, eventually, the decision concerning those entities which should make use of the IFRS for SMEs depends on nationwide regulatory authorities and those who set the standard. These bodies will spell out thorough criteria for eligibility, together with quantified criteria

based on revenue, assets or number of employees. In Ghana, SMEs in the agricultural sector present financial statements by the use of IFRS for SMEs. This reporting standard guides SMEs in the agricultural sector in the reporting of biological assets in their financial statements.

## 2.3 International financial reporting standards (IFRS)

The incorporation of IFRS into accounting practices all over the world is indispensable for international accounting comparisons to be as uncomplicated as possible. Due to the enhancement in operations by firms and the complex nature of business activities all over the world, it has become necessary to have uniform standards which outline rules as to how financial statements should be reported. Sylwia and Steve (2010:9) opine that IFRS follows special doctrine which must be followed by the preparers when adopted. Accountants by nature need to have experience and make judgments. That is why IFRSs exist as a guide for accountants (Sylwia & Steve, 2010). IFRS is now an accepted set of standards used as a guide to present financial statements to help maximise stakeholders' interests in business activities. IFRS is accepted by more than 120 countries and more are still continuing the process. A total of 200 countries were estimated to be migrated to the adoption of the IFRS into financial statement preparation in 2014 (Solomon, 2011). Ghana has also adopted IFRS instead of its own Generally Accepted Accounting Principles (GAAP). This has made it to be up-and-coming as the generally applied and accepted worldwide accounting standards since it replaces the International Accounting Standards (IAS) which was also issued by the International Accounting Standards Board from 1973 to 2000.

Sanders (2011) mentioned that the IASB noted in 2011 that there were two leading questions as to whether investors should be the key audience for financial reporting and whether accounting standards should comprise a goal of monetary constancy. These questions have a direct relationship with the present discussion over fair value accounting. Accounting of fair value has nowadays created frenzied responses from those aiming to increase the measurement approach and those hoping to limit it.

Volha (2010: 24) noted that the Financial Accounting Standards Board (FASB) and the IASB are the two most powerful standard-setting bodies. IASB and FASB have a time-honoured assurance to work together in an internationally harmonised approach on getting better financial reporting standards. The predicament is that fair value accounting and the other aspects of US GAAP and IFRS did not hold back the current financial predicament. The predicament has made the preparers of financial statements demand supplementary guidance regarding how to measure fair value in various markets. Also, financial information users need improved disclosures about the essential estimates underlying level 3 fair values and how sensitive fair value is to those estimates (Volha, 2010).

### 2.3.1 Users of the financial information of SMEs

There are several different users of corporate reports, and all of these stakeholders have different information requirements. According to the IASB (2015:13) financial statements prepared in accordance with the IFRSs meet the common information needs of most users. The IASB also notes that there are inherent limitations to financial statements. In addition, financial statements fail to give users all the information required in order to make rational economic decisions because, in the main, financial statements only show financial effects of historical transactions (IASB, 2015).

IFAC (2006) mentions that the main users of the financial statements of SMEs are the owner managers and owner non-managers, venture capitalists, lenders, grant-awarding bodies and well-wishers. The framework for the preparation and presentation of financial statements (IASB, 2015) also identifies the users of financial statements to include present and potential investors, employees, lenders, suppliers, customers, governments and the public. For those companies with public accountability, this imposes a transparency requirement in terms of which all their undertakings must be consistent with the interests of all stakeholders. As a result, those who draft financial statements are under severe pressure from all sides to ensure that financial statements meet all the needs of every potential stakeholder. Nevertheless, according to the IASB (2015:10), in reality, it is impracticable for the financial reports to accomplish this prerequisite without running the risk that they will in due course, be tolerable for many but perfect for no one. It

is normally argued that investors, lenders and their advisors are the key users of financial statements. Conversely, as the debate on the simplification of financial statements intensifies, those who provide capital are seen as the primary users of financial statements (IASB, 2015:8), as large creditors, such as banks and the tax authorities do have the right to more specific and tailored information.

## 2.3.2 User information needs

The IASB (2015) indicated that information in respect of the cash flow generating capacity of an entity is the key to all major user decisions, including management assessment. It would appear that users are of the opinion that information about the cash generating capacity of an entity is the key to hold/buy/sell, management evaluation and credit assessment decisions (IASB, 2015:18). This may be that an appreciation of the nature of the operating environment of SMEs (IASB, 2015:42) may result in the draft of the financial statements being mandatory to reveal information about vital assumptions relating to the future, as well as important sources of assessment doubt at the date of reporting in the explanatory notes. These will bring an important risk of causing a material adjustment to the carrying amounts of assets and liabilities within the subsequent financial year. The most important information for external users concerns the liquidity of the entity and the ability of the entity to generate cash flow. The management commentary is preferred in order to provide prospective financial information, more information on the risk management process and the competitive analysis.

According to the IASB (2009b), management commentary provides a framework within which to interpret the financial performance, financial position and cash flows of an entity. It also provides an opportunity to understand the objectives of management and management's strategies in terms of achieving those objectives. IFAC (2006) also mentioned that banks use financial statements of SMEs mainly to establish the capacity of the entity to repay and to assess profitability, security and liquidity. On the other hand, owners utilise financial reports for a multiplicity of functions consisting dividend payouts, ascertaining remuneration awards, monitoring performance and capital expenditure, planning, assessing loans and financing budgeting, as a confirmatory tool and, in some countries, as a means of minimising tax liabilities. Tax authorities also have a propensity

to be the key recipients of SMEs' accounts, mainly for tax assessments. The increased use of fair value accounting has resulted in lengthy valuation assumption disclosures. Management often uses its commentary, either to disperse or to intricate on the market factors reflected by the fair value. In terms of the IFRS for SMEs, the small and medium-sized entities have been spared most of the fair value measurements as well as segment information analysis (IASB, 2015). The segmental disclosures make available a greater disaggregation of core business results in line with the information available to management. It would be interesting to examine the distinctiveness of those disclosures that users find the most useful, and whether these disclosures are consistent with the information needs of small and medium-sized entities.

## 2.4 IFRS for small and medium-sized entities in the agricultural sector

As per the various sections of the IFRS for SMEs (IASB, 2015) of IFRS, an entity using this IFRS which is engaged in agricultural activity shall disclose its accounting policy for each class of its biological assets as follows:

(a) Fair value model in paragraphs 34.4–34.7 will be used by the entity for all biological assets for which fair value is readily determinable without undue cost or effort.

(b) Cost model in paragraphs 34.8–34.10 will be applied by the entity for all other biological assets.

### 2.4.1 Recognition

Biological assets or agricultural produce will be recognised by the entity when and only when:

(a) The control is in the hands of the entity as a result of past dealings;

(b) It is likely that economic benefits in the future associated with the asset will flow to the entity; and

(c) The fair value or cost of the asset can be reliably calculated with no excessive cost or effort (IASB, 2015: par 34.3).

**2.4.2 Measurement – fair value model**

Biological assets shall be measured by an entity on initial recognition and at each reporting date at its fair value less costs to sell. Changes in fair value less costs to sell shall be recognised in profit or loss (IASB, 2015).

Harvested agricultural produce from the biological assets of an entity shall be measured at its fair value less costs to sell at the point of harvest. Such measurement is the cost at that date when applying Section 13 Inventories or another applicable section of this IFRS (IASB, 2015 sec. 34.5).

According to the IASB (2015) in the determination of fair value, an entity shall factor in the following:

(a) The quoted price in that market is the appropriate basis for determining the fair value only if an active market exists for a biological asset or agricultural produce in its present location and condition. The existing market price is expected to be used if an entity has access to different active markets.

(b) An entity shall use one or more of the following, when available, in determining fair value if an active market does not exist:
(i) Given that there is insignificant change in economic conditions between the transaction date and the end of the reporting period, the most recent market transaction price shall be used;
(ii) Market prices for comparable assets with modification to reflect differences; and
(iii) Sector benchmarks such as the value of oil palm plantation expressed for every hectare and the value of sheep expressed per kilogram of meat.

(c) In diverse situations, the sources of information mentioned in (a) or (b) could propose diverse conclusions regarding fair value of a biological asset or agricultural produce. An entity factors in the grounds for individual disparities, to reach the most consistent fair value estimate surrounded by a comparatively slight series of realistic estimates.

(d) In a number of situations, fair value may possibly be determined devoid of excessive cost or effort even though the information to determine prices or values of biological assets may not be available in the market. An entity shall factor in whether the present value of expected net cash flows from the asset discounted at a current market determined rate results in a reliable measure of fair value (IASB, 2015 sec. 34.6).

### 2.4.3 Disclosures – fair value model
According to IASB (2015) an entity shall unveil the following with reference to its biological assets calculated at fair value:

(a) A description of every group of its biological assets.

(b) The mode and important assumptions used in the determination of the fair value of every class of agricultural produce at the time of harvest and every class of biological assets.

(c) A reconciliation of changes in the carrying amount of biological assets between the beginning and the end of the current period. The reconciliation shall include:

(i) The gain or loss arising from changes in fair value less costs to sell;

(ii) Increases as a result of purchases;

(iii) Reductions as a result of harvest;

(iv) Increases as a result of business combinations;

(v) Net exchange disparities resulting from the conversion of financial statements into a dissimilar presentation currency and on the conversion of a foreign operation into the presentation currency of the reporting entity; as well as

(vi) Other changes (IASB, 2015 sec. 34.7).

### 2.4.4 Measurement – cost model
In cases where the fair value of biological assets is not readily determinable without excessive cost or effort, the entity shall measure at cost less any accumulated depreciation and any accumulated impairment losses (IASB, 2015 par. 34.8).

To sell at the point of harvest, harvested agricultural produce from biological assets shall be measured by an entity using fair value less estimated costs. Such measurement is the cost at that date when Section 13 or other sections of this IFRS is applied (IASB, 2013 sec. 34.9).

## 2.4.5 Disclosures – cost model

The following shall be disclosed by an entity relating to its biological assets calculated by means of the cost model:

(i) An account of every group of its biological assets;

(ii) A justification of reasons fair value cannot be calculated dependably;

(iii) The method of depreciation used;

(iv) The depreciation rates or useful lives used; and

(v) The gross book value and the accrued depreciation (amassed with accumulated impairment losses) at the start and end of the period (IASB, 2015 sec. 34.10).

## 2.5 Effects of IFRS adoption on financial statements

Ball (2006) gives a number of direct and indirect probable advantages of IFRS adoption. The direct advantages comprise further accurate, comprehensive and appropriate financial information, a reduced amount of unfavourable selection for undersized investors, added globally analogous information, extra well-organised capital market and bigger takeover premiums. The indirect advantages consist of reduction of equity capital cost, and enhanced value of financial accounting information in contracting amid firms and a diversity of parties. Nevertheless, Ball (2006) also mentions a number of issues that are likely to limit the triumph of the adoption of IFRS. The priority is the better application of fair value accounting beneath IFRSs. Ball (2006) argues that in a situation of no liquidity of capital markets, quoted prices can be influenced by managers. In an instance where valuation models are used to estimate fair values, the outcomes can be piercing; and worse, the estimation can be influenced by managers through their options on models and parameters.

However, Hung and Subramanyam (2007), Goodwin, Ahmed and Heaney (2008), as well as Clarkson, Hanna, Richardson and Thompson (2011:1-17) also use a similar "same firm-year" research design. Hung and Subramanyam (2007) investigated a sample of 80 German firms adopting IAS for the first time during the period 1998 through 2002. Goodwin et al. (2008) analysed a sample of 1,065 Australian listed firms while Clarkson et al. (2011) examined a sample of 3,488 firms from 14 European Union (EU) countries and

Australia that initially adopted IFRS in 2005. Moreover, both sets of financial statements are audited and enforced. Barth, Landsman and Lang (2008) used 319 firms who have adopted IFRS voluntarily from 21 countries. The findings showed that earnings quality is higher for entities that adopted IAS. Numerous other studies have examined the effects of voluntary IAS adoption from different perspectives. Ashbaugh and Pincus (2001), using 80 adopters from 1990 to 1993, find that analysts' earnings forecast errors diminish after IAS adoption. Therefore, it is applicable to measure the quality of the standards, not the quality of the enforcement of the standards.

Ball (2001:5-27) argue that simply mandating new accounting standards for public financial reporting is the same kind of "window dressing", except when accompanied by comprehensive amendment of the infrastructure that determines the financial reporting incentives of auditors and managers. Ghana has legitimately given companies an option of accounting standards preceding compulsory adoption of IFRS. This means that companies expecting net benefits from voluntary adoption of IFRS are self-selected out of this study.

Additionally, Daske, Hail, Leuz and Verdi (2007) discovered unpretentious adoption effects for the firm's cost of capital and stock liquidity. To summarise, results of voluntary IFRS adopters show, at least, some positive effects. The limitation of these studies is that sample sizes are small, relative to the population of firms in the sample countries. Besides, voluntary adopters are likely to differ from non-voluntary adopters in the sense that results ascertained from the above studies are not generalisable to non-voluntary adopters. A growing number of studies began to scrutinise the effects of mandatory IFRS adoption after the EU (including Norway and Switzerland) and Australia adopted IFRS in 2005.

Based on data from 14 EU countries and Australia, Clarkson, Hanna, Richardson and Thompson (2008) unearthed that IFRS increases information content of book value and earnings, and the increase is greater for code law countries than common law countries. Similarly, Capkun, Cazavan-Jeny, Jeanjean and Weiss (2007) find that earnings reconciliation adjustments from local GAAP to IFRS are value relevant using 1,722 companies from nine European countries where early IFRS adoption is not allowed.

A further study was conducted by Daske et al. (2008) through the use 10,789 mandatory adopters from 26 countries. The study revealed that the adoption of IFRS is connected with enhanced market liquidity (a market where large orders can be executed without incurring a high transaction cost) and Tobin's Q (the ratio between a market value of physical asset and its replacement value), but the results for cost of capital are mixed.

Daske et al. (2008) asserted that on average, market liquidity increases around the time of the introduction of IFRS. An increase in equity valuations and a decrease in firms' cost of capital was also observed, but only if it accounted for the possibility that the effects occur preceding the official adoption date. On partitioning of sample, the researchers established that the capital-market benefits arise only in countries where there are incentives for firms to be transparent and where there is also a strong enforcement of law.

Lantto and Sahlström (2009) conducted a study on the impact of IFRS adoption on key financial ratios and revealed increases in profitability ratios and gearing rations as well as decreases in price to earnings ratio, liquidity ratio and equity ratios. The outcome of the study showed that the acceptance of IFRS changes the magnitudes of the key accounting ratios of Finnish companies by moderately escalating the profitability ratios and gearing ratio, and considerably decreasing the price earnings ratios and slightly decreasing the equity and quick ratios.

Armstrong, Barth, Jagolinzer, and Riedl (2010) examined how the stock market in Europe responds to the adoption IFRS. The study considered responses from 16 firms. It was revealed that the quality of information is lower, especially from banking institutions that initially adopted IFRS, whilst there is higher pre-adoption information irregularity, reliable for investors expecting quality information from IFRS implementation. The study finally concluded that a positive reaction to IFRS implementation events for firms with elevated quality pre-adoption information, consistent with investors expecting net convergence benefits from IFRS adoption.

Zhou, Xiong and Ganguli (2009), in a similar study of Chinese firms' data came to the conclusion that the firms adopting IFRS have less possibility to smooth earnings in the post IFRS adoption period. The findings of the study also pointed out the call for a strong enforcement mechanism of financial reporting standards in up-and-coming markets.

Armstrong et al. (2010) conducted a study, using firms in Europe. The study revealed that firms that have quality information is as a result of initial implementation of IFRS which proved positively consistent with investors expectation. This study sampled 1084 EU firms during the period of 1995 - 2006.

Siqi (2010) concluded that on convergence, the implementation of IFRS by mandatory adopters considerably trims down the cost of equity. It was also suggested in the study that this decline only exits in countries that have put in place strong legal enforcement mechanisms. Increased disclosures and enhanced information comparability are two mechanisms behind the cost of equity reduction.

Similarly, Cai and Wong (2010) conducted a study on global capital markets and summarised that the countries which have implemented IFRS have a higher degree of integration on their capital markets following their IFRS implementation than prior to the adoption. Paananen and Lin (2009) gave a contrary view to prior research indicating that IFRS implementation enhances quality of accounting information. It was revealed that accounting information quality has rather worsened after a while in Germany for companies that have adopted IFRS.

In another study, Iatridis (2010) concluded that the implementation of IFRS has positively affected the financial performance (measured by profitability and growth potential) of firms on account of firms listed on the London stock exchange. The study also established that the transition to IFRS appears to introduce unpredictability in figures of income statement following the fair value orientation of IFRS.

Barth et al. (2008) studied financial data of firms from 21 countries. The study intended to establish whether the application of IAS/IFRS brings about higher accounting quality. The conclusion of the study was that firms applying IAS/IFRS have less earnings management, more timely loss recognition and more relevance of accounting numbers.

The study also found out that there is an improvement in accounting quality of firms that have implemented IAS/IFRS between the periods of pre-adoption and post adoption.

Steffee (2009) stated in his article "Audit Integrity" that there are considerable discrepancies in the techniques taken for the implementation of IFRS by individual Western European countries and companies. Steffee (2009) viewed that corporations in Luxembourg, Austria and Switzerland display the most translucent accounting practices and best corporate governance. On the contrary, European Banks with large capitalisations exhibit very aggressive accounting and poor standards of governance.

An article "Economic Effects of IFRS adoption" by Epstein (2009) revealed that the adoption of IFRS increases market liquidity, decreases investors' transaction costs, lessens cost of capital and aids in global capital formation and flows.

Chen, et al. (2010) conducted a study on financial data, using public companies listed in 15 states that are members of the EU before and after the full adoption of IFRS in 2005. The study uncovered that the adoption of IFRS enhances quality accounting indicators in the EU. The study also uncovered fewer earnings headed for an end, a lower degree of complete flexible accruals and advanced accruals quality. It was again revealed that the quality of financial reports improves due to IFRS adoption.

## 2.6 Advantages in adopting international financial reporting standards (IFRS)

According to PricewaterhouseCoopers (PwC, 2011), the adoption of IFRS for the preparation of financial statements by companies and other corporate institutions results in a number of advantages. The adoption will bring a lot of foreign investment as investors are assured of quality financial statements and fairness in presentation. The company enjoys a lot of advantages when capital is being sought for, in view of the fact that investors at all times would have assertion in the financial statements which management presents. The adoption of IFRS has a greater international recognition given that it has been adopted in over 120 countries globally. It also makes it easy to compare financial data between two or more firms from diverse countries. The web pages of

PricewaterhouseCoopers (PwC, 2011), categorically stated the merits that firms who adopt the IFRS would gain. The advantages mentioned include:

(i) There would be quality in financial reporting information. This is as a result of reducing the cost of comparing alternative investment and improving the quality of financial reporting;

(ii) IFRS is adopted to prepare financial reports and firms therefore benefit because investors are willing to provide funds; and

(iii) The adoption of IFRS helps multinational firms to make financial reporting straightforward, as a single framework of reporting is applied for the whole group (PwC, 2011).

It should be well noted that standard adoption of standards to prepare accounts are cautiously deliberated on by firms and economies in general before they are implemented. Economists and listed firms try to deliberate upon a number of advantages and possible demerits.

Gabriele (2010) stressed in his article "IFRS adoption'' in the EU that the adoption of IFRS in the EU countries some years back was intended to improve competitiveness in the capital markets in Europe through the establishment of a set of standardised and capital markets favourable for investment. It was added that IFRS adoption in Europe with capital markets in mind is to ensure proper functioning of financial markets, reduction in cost of capital and to facilitate an increase in access to funds for companies. It is believed that when financial statements are prepared on the basis of IFRS, it ensures accounting harmonisation provides financial markets with very high quality information, covers their cost of capital and finally augments their accessibility to capital.

Guggiola (2010) mentions that IFRS adoption by companies helps reduce costs of financial reporting for all companies that have subsidiaries across borders through the operation of similar accounts. Thus, there will not be any difficulty in understanding the

financial reports of both parent and subsidiary firms. Subsidiaries in different countries will have the same accounts with the parent companies when they all adopt a single method of reporting. This will ultimately make financial report information understandable. Globally, transferability of knowledge from accounting professionals from one financial system to the other becomes better. It is very simple to transfer expatriates who have knowledge in identical standards applied in one economy to the other to work in such economies (Guggiola, 2010).

According to Ballas, Skoutela and Tzovas (2010), the implementation of IFRS ensures comparability and transparency in financial statements with other businesses and those in the same industry. This helps to fulfil the accounting quality of understandability and relevance for all users of the accounting information. Ballas, et al. (2010) are of the opinion that from the time Greece adopted IFRS, accounting information users consider that the information provided by IFRS is more reliable in comparison to what was prepared, based on local GAAP. In addition, firms that adopt IFRS to prepare accounts find it easy to get access to international markets and external financing. Before external investors commit funds into any economy of developing countries, they look at it regarding whether or not the returns on investment will be positive, and regarding what guiding principles the accounts preparation will be based on. This will boost the confidence of investors to pump more money into endowment economies (Ballas, et al., 2010).

Beuselinck, Joos, Khurana & Meulen (2009) opined that the adoption of IFRS discloses new information relating to firms and then reduces the surprise of disclosures in future. Landsman, Maydew, and Thornock (2011) are of the opinion that share prices and trading activities are affected through the application. It was concluded that the implementation of IFRS improves the information content on earnings and also increases foreign investment. It was also revealed that the level of enforcement in a country has an effect on IFRS implementation.

Brüggemann, Daske, Homburg, and Pope (2009) conducted a study by sampling 4,869 firms from 31 countries on the effect of IFRS adoption on the Open Market at the Frankfurt Stock Exchange. It was revealed that the adoption of IFRS enhances marketing activities of a firm. It was added that the implementation of IFRS promotes investment in foreign equity.

Yu (2010) concludes that IFRS adoption boosts cross border holdings through the reduction of costs associated with information processing and foreign investors, through improving financial information comparability, and ultimately via minimising other limitations such as geographic distance. Harmonisation of accounting reporting systems is a further useful means to draw foreign capital than enhancement in reporting systems of individual countries (Yu, 2010).

Flourou and Pope (2012) wanted to know whether or not compulsory adoption of IFRS leads to an enhancement in institutional possession of equity. Taking into consideration the pre adoption and post adoption period, it was revealed that there is an improvement in ownership. The decisions of institutional investors are also affected due to IFRS adoption. A significant caution in their study is that the optimistic effect of IFRS ownership is only established in countries with firm legal enforcement and least corruption. Several studies investigate the effects of mandatory adoption of IFRS for security market analysts for the reason that they are vital users of financial reports. The research on IFRS builds on the existing literature that puts forward high quality financial statement information which assists analysts (Hope, 2003; Lang & Lundholm, 1996).

Analysts are of the view that analysts of firms that adopt IFRS have reliable forecasting information compared to analysts following non-IFRS firms. It was concluded that there is always an improvement in information quality and inter- firms comparability for firms that have implemented IFRS (Horton, Serafeim & Serafeim, 2012; and Tan, Wang & Welker, 2011).

## 2.7 Disadvantages and costs of IFRS

The expected benefits of IFRS adoption may not be achieved due to several reasons. Barth, et al. (2008) indicated that less true and faithful representation of the firms and underlying economics will emerge as result of reduction in accounting alternatives. Reduction in financial reporting quality, even when high quality accounting standards are implemented, arises as a result of weak enforcement mechanisms of countries that have adopted IFRS (Brown & Tarca, 2007; Chen & Cheng, 2007).

Moreover, in countries where there is strict enforcement systems and improved IFRS implementation, the effects of IFRS on capital markets are more pronounced (Chen & Cheng, 2007; Hail & Leuz, 2006). Wang and Yu (2009) as well as Leuz (2006) demonstrated that capital market effects were also clear when well-built reporting incentives and, therefore, higher financial reporting quality was evident. An elevated departure amid IFRS and local GAAP and, therefore, a larger change of domestic accounting rules (Byard, Li & Yu, 2011; Daske, et al., 2008) are also relevant factors.

With respect to the effect of capital markets, prior authors suggested that stock market liquidity can be improved with the introduction of IFRS (Narayan & Zheng, 2010) and cost of capital reduced (Ahmed, Neel & Wang 2010; Li, 2010), even though a large number of other authors argued that this may not at all times be the case (Armstrong, et al., 2010; Daske, et al. 2008; Hail & Leuz, 2009; Karamanou & Nishiotis, 2009; Lambert, Leuz & Verrecchia, 2007).

Additionally, Smith (2009) is among the authors who have spoken out regarding the IFRS transition cost. Transition costs may differ from company to company and some may be common to all companies across the globe (Smith, 2009). According to the report "EU implementation of IFRS and the Fair Value Directive" (ICAEW, 2007), the ten common conversion costs of IFRS are listed below:

(i) Training of staff;

(ii) Systems and software changes;

(iii) Additional costs of external audit;

(iv) Additional costs of external data;

(v) IFRS project team;

(vi) Communications with third parties;

(vii) Additional staff training (such as IT staff, internal audit and management);

(viii) Tax advice;

(ix) External technical advice; and

(x) Costs incurred as a result of changes such as renegotiating debt covenants.

Studies of accounting firms (Larson & Street, 2004; PwC, 2011) discovered that a lot of firms employ additional employees for IFRS assignment; therefore, the real costs of resources could be higher than the figures reported. A study conducted by ICAEW (2007) also uncovered that the grading of the cost of preparing the first set of IFRS financial statements and recurring costs varies, taking into consideration the size of the company. Other costs which are less physical in addition turn out to be obvious whilst disclosure of information to the investors will give a competitive advantage to other firms (Fox, Helliar, Veneziani, & Hannah, 2013).

## 2.8 Challenges of IFRS implementation

Heidhues and Patel (2008) mentioned that the move to new reporting standards results in numerous difficulties for diverse interest groups such as auditors, preparers, users and regulators. Especially, the challenge for regulators is to discover to what extent national and local reporting standards are comparable to IFRS. This requires that the practitioners should build up an exhaustive analysis in order to put into practice the changes in hardware, software and reporting processes (AICPA, 2011).

Additionally, the perception of the general public, with regard to the changes in financial statements of firms that have implemented IFRS, is challenging (PWC, 2011). In the opinion of auditors, a well structured plan is needed in order to equip their staff with the skills needed to assist their clients during implementation (Deloitte and Touche, 2008).

Moreover, Jermakowicz (2004) listed a number of key challenges in the process of adopting IFRS including:

(i) The lack of guidance of first time IFRS reporting;

(ii) The weak enforcement of law and regulations;

(iii) The complicated nature of some standards of IFRS; and

(iv) The underdevelopment of capital market

Tokar (2005) also supplemented that for a country with a dissimilar certified language instead of English, the translation of IFRS into the official language is an additional impediment during the change period. The implementation of IFRS is again difficult as IFRS is incessantly developing (Fox et al., 2013). This results in a lot of challenges during gradual convergence to complete observance under IFRS (Joshi, Bremser & Al-Ajmi, 2008).

Patel and Heidhues (2008) as well as Wong (2004) have also articulated their concerns with regard to how students will study IFRS and how professionals will stay abreast of new standards. Education for both professionals and non-professionals is another significant obstacle to converge IFRS with national accounting standards.

Ali and Ustundag (2009) conducted a study on the process of developing Financial Reporting Standards universally and its effect in a developing nation, Turkey. The study revealed several challenges in the IFRS implementation such as complexity in the structure of international standards, potential knowledge shortfalls and application as well as enforcement difficulties.

James (2011) also mentioned some significant and applicable problems when IFRS are implemented, particularly in developing countries where accounting infrastructure is at all times poor. The study revealed the following challenges:

i. A need to modify all existing accounting software and information in order to enable the preparation of accounts, based on International Financial Reporting Standards (IFRS);

ii. Cost of training the current staff is extremely high. This encourages the continuous growth of the entity. Usually, appropriate training is not given to the staff when IFRS is implemented; and

iii. A need to educate investors over a long time before they became abreast with the new standards (James, 2011:127).

## 2.8.1 IFRS implementation Challenges in Africa

Deloitte Touche Tohmatsu Limited and PricewaterhouseCoopers (2012) state that most African countries fail to prepare financial statements on the basis of IFRS. Their study concluded that countries in Africa that have adopted IFRS as a guide to prepare financial statements face some challenges. The study highlighted implementation challenges facing countries in Africa like South Africa, Kenya and Nigeria. Notably, in spite of such challenges, some countries have taken the risk and have effectively implemented IFRS. According to a report of Deloitte Touche Tohmatsu Limited (2012), 18 out of 53 countries in Africa, representing 34%, have successfully adopted IFRS. The following countries were listed: Ghana, Lesotho, Botswana, Kenya, Libya, Mauritius, Mozambique, Namibia, Nigeria, Sierra Leone, South Africa, Swaziland, Tanzania, Uganda, Zambia, Morocco, Zimbabwe and Malawi.

At the United Nations Conference in Geneva in 2008, Kenya and South Africa were identified to have experienced three main categories of challenges in the IFRS adoption process. The challenges were identified and categorised on the basis of institutional, enforcement and technical challenges (UNCTAD, 2008).

## 2.8.1.1 Institutional challenges

At the conference organised by the UN on Trade and Development, the UN recognised challenges that cropped up with regard to the introduction of IFRS as an element of the governance of firms in any jurisdiction, where laws and regulations already exist. These challenges were palpable in the case studies of Kenya and South Africa, where the IFRS adoption is likely to result in divergence amid IFRS requirements for financial reporting and existing laws (UNCTAD, 2008:3).

It was stated in the UN study that IFRS is proposed to draft general-purpose financial

statements.  On the other hand, financial statements prepared on the basis of IFRS could also be necessary to be prepared as a result of legal requirement. Nevertheless, whereas increasing IFRS usage for such purposes could result in less cost, it may generate misapprehension among regulators and reporting entities, mostly in circumstances where the local standard for financial reporting is at variance with the IFRS (UNCTAD, 2008:4).

### 2.8.1.2 Enforcement challenges

Challenges in relation to institution result in issues relating to enforcement. The challenge for Africa is not being unable to adopt IFRS; instead it is the challenge of putting measures in place to enhance the enforcement of IFRS implementation(UNCTAD, 2008). Ridley (2011) is of the view that ensuring quality implementation is more advantageous than influencing countries to adopt IFRS. Poor adoption of IFRS would certainly bring about additional challenges. In the countries where IFRS is being adopted, accounting professional bodies must be responsible in the process of enforcement. In some countries, this enforcement has been supported by securities exchange commissions, banking and insurance supervisory authorities, stock exchanges and capital markets authorities (UNCTAD, 2008).

### 2.8.1.3 Technical challenges

It can be deduced from the United Nations Conference on Trade and Development (UNCTAD) that Africa faces a deficiency of qualified accountants (technical capacity) who are sufficiently educated in IFRS.  This was recognised as a national issue faced by a lot of countries in a Global Leadership Survey performed by the IFAC, through their member bodies (UNCTAD, 2007). There are scarcely adequate professionals to ensure first-time adoption. Therefore, the invariable updating of IFRS by the IASB makes it even more complicated for countries with shortage of capacity to stay familiar with challenges. However, the challenges of implementing IFRS in South Africa, Kenya and Nigeria, as discussed at the United Nations conference, are summarised in table 2.1 below:

**Table 2.1 Challenges of implementing IFRS in South Africa, Kenya and Nigeria**

| South Africa | Kenya | Nigeria |
|---|---|---|
| High cost of implementation, including an increase in staffing costs | Lack of guaranteed trained persons who understand the use of IFRS | Inconsistency between existing IFRS and laws at the level of entity and country; |
| Poor understanding of IFRS | Inadequate educational training facilities for accountants. | Nonexistence of accounting firms to discover issues relating to financial reporting and make available explanation to circumvent variations |
| Confusion experienced around company performance information | Lack of synchronisation of developments between conventional university training, and training through professional programmes | There is no representative on the IASB board |
| No representatives in the process of setting standards | Lack of continued professional development of professional accountants | No synchronisation exists between professional qualification and regulation requirements as well as accounting education institutions |
| Conflict between IFRS requirements for financial | High cost of material, seminars and workshops for | Experts in IFRS are scarce and do |

| reporting and existing laws | qualified accountants | not have practical competence |
| --- | --- | --- |
| IFRS generates misapprehension between regulators and reporting entities | Lack of representation in the standard-setting process | Lack of coherence in the regulatory system |

Source: UNCTAD (2008:92-120)

## 2.9 Historical background of the use of fair value accounting

At the commencement of the 21st century, the manifestation of accounting for fair value is regularly offered as a modernisation. Hitherto fair value has been in existence and has gotten authenticity as a means of accounting for asset values previously but has always been superseded by historical cost accounting or incorporated into "mixed measurement" practices.

### 2.9.1 Historical perspective

There are only a few papers that have studied fair value accounting from a historical perspective. Richard (2005) is one of those people who have conducted historical studies on fair value. The study examined the uses of fair value in France and Germany in the 19th century. The study revealed that valuing fair value on the basis of cost would appear to preponderate in the first European regulations (around 1673 to 1800). A unique valuation of fair value was suggested by the legal society, following 1800, and served as legacy in the accounting regulations of German and France for the whole of the 19th century and even beyond. Watanabe (2007) is one more appealing study on the development of accounting. It investigates changes that took place during the period of the industrial uprising in Britain. The development of all-encompassing organisations such as railways in the 1840s raised the concern of shareholders in relation to the content and form of financial statements. The market value costing method for fixed assets also emerged during this time.

### 2.9.2 Fair value accounting in the twentieth and twenty-first centuries

Prior to the issuance of generally accepted reporting standards, firms were at liberty to select any standard to prepare financial statements. A common practice in the early 20th

century was the use of the market. During this period, statements of financial position repeatedly incorporated upward revaluations of long-term assets such as equipment, intangible assets, property and plant. There was a study of 208 large industrial firms in the United States between 1925 and 1934 (Fabricant, 1936). The study found that 75% of banks were left with asset portfolios subjugated by weak and underperforming assets, and many of these banks finally went bankrupt. There was a concern that financial reports can be influenced through the discriminating selling and buying of assets at any period where financial assets are not held at their economic value (i.e., market or fair value). Since then, the autonomous institution in charge of the establishment of standards of financial accounting in the US, the FASB, has embarked on a long-term project to incorporate fair value concepts in the accounting for financial assets and liabilities (Casualty Actuarial Society, 2000).

In 1994, a statement of Financial Accounting Standards (FAS) 115 was issued by the FASB, and it was applicable to all firms engaged in financial activities. It categorised financial assets into three: those held for sale, those held to maturity and those held for trading. FAS 115 permitted firms to use discounted cash flow to value assets held to maturity, and it required such firms to use fair value to value assets in the two latter categories. This was amplified in 1998, when FAS 133 was implemented. It was stated by FAS 133 that derivatives (that is a contract between two or more parties whose value is based on an agreed-upon underlying financial asset, index or security) must be carried on the statement of financial position at fair value and that changes in their value must be those of the FASB and fair on financial instruments, with the exception of those associated with certain hedging activities. The commission recommended that IAS 40 investment property (2000) should be used to determine fair value of non-financial assets and IAS 41 Agriculture (2000) model be adopted by all agricultural firms (Georgiou & Jack, 2008).

Fair value usage is endorsed in several standards. For instance, IAS 38 Intangibles, IAS 16 Property, Plant and Equipment as well as IAS 40 Investment Property all allow

reporting entities to opt either for the revaluation or the cost model (Volha, 2010). Most financial instruments (IFRS 9), however, have to be recognised at fair value.

In 2002, the European Parliament compromised authorising firms listed on the European stock Exchange to apply IFRS in the preparation of financial reports for the accounting period commencing on or following 1 January, 2005. Ghana requires all listed companies to report their consolidated financial statements using IFRS beginning with the 2007 financial year (Volha, 2010).

Many investor associations, trading-oriented financial institutions and accounting academics share the belief that fair value accounting benefits investors compared to alternative measurement approaches, including amortised cost accounting. This is because fair values are more accurate and timely, and are also comparable across different firms and positions even in the conditions of market bubbles (that is when market participants in a stock market drive stock prices above their value in relation to some system of stock valuation) (Ryan, 2008). Moreover, fair value accounting has been said to prevent firms from managing their incomes through trading gains, since gains and losses are recognised when they occur, rather than when they are realised. It is also important for investors to update their expectations about future cash flows on the basis of new information on a timely basis, and that is exactly what fair value accounting does (Ryan, 2008).

### 2.9.3 Definition of fair value
According to the IASB (2013a:115) fair value is defined as the charge received from the sale of an asset or compensated to transfer a liability in an orderly transaction between market participants at the measurement date (that is, an exit price). The definitions of fair value emphasise fair value as a market-based measurement, not an entity-specific measurement. With fair value measurement, the same assumptions are applicable to an entity as market participants in pricing assets or liabilities under current market conditions, together with assumptions about risk. Thus, the intention of an entity to settle or hold an asset or otherwise fulfil a liability is insignificant when measuring fair value (IASB, 2012a).

IAS 41 (IASB, 2009b: par 32.1) defines fair value as the amount for which an asset may be exchanged or a liability settled, between knowledgeable, willing parties in an arm's length transaction. In terms of the training material on fair value measurement (IFRS 13), fair value is the charge received from the sale of an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. In the definition of fair value from the standard, the term exit price is noted. The IASB defines "exit price" as "the amount to be received from the sale of asset or paid to transfer liability" (IFRS 13.2-3). It means that fair value is the exit price between market participants who are asset holders or debtors at the measurement date. Fair value is market based, rather than an entity-specific measurement. It is measured, using the assumptions that market participants would use when pricing the asset or liability, including the assumptions about risk (IFRS 13.2-3).

However, Statement of Financial Accounting Standards No. 15 (GAAP) refers to the fair value of an asset as the purchasing cost of the asset or the selling charge in a current transaction between marketplace participants in the reference market, excluding in liquidation (Ting and Soo, 2005). With regard to the position statement, the fair value of a liability is the charge based on which liability may possibly incur or pay to transfer a liability in a current transaction between marketplace participants in the reference market, other than in liquidation. Fair value is, thus, the value at which parties dealing at arm's length would be willing to buy or sell an asset or liability.

Doron and Stephen (2008:10) thrash out three concepts of fair value accounting. In the first place, fair value is basically used as a substitute measurement in a "mixed attribute model". This treatment of fair value is otherwise used with historical cost for the identical asset or liability but at a dissimilar time period. Accounting is first and foremost historical cost accounting, but fair values are used under certain conditions. For example, fair value is used in new beginning accounting; and for first measurement, this may be in the form of the purchase of an asset. Secondly, fair value is used as an entry value, and afterwards, assets' revaluation is based on replacement cost and then current costs as

recorded in the income statement. Unrealised gains and losses are recognised in comprehensive income.

Thirdly, fair value is used as an exit value. This is where liabilities and assets are remarked each period to current exit price, with unrealised gains and losses from the remarking recorded as part of comprehensive income (Doron & Stephen, 2008).

The Canadian Institute of Chartered Accountants defined fair value as the value of consideration agreed on in a fair transaction based on both voluntary sides familiar with the situation (Canadian Accounting Standards Board, 2006). Staff of the Canadian Accounting Standards Board (2006, par 88) defines fair value as the "amount at which an asset or liability could be exchanged between knowledgeable, willing parties in an arm's length transaction."

IFRS 9 refers to fair value as the exchange price of an asset, or compensation of a liability between knowledgeable, willing parties in an arm's length transaction (IASB, 2013). Statements of Financial Accounting Concepts (SFAC) 7, in addition, refers to fair value as the amount spent in purchasing an asset or spent on liability in a current transaction between willing parties, that is, excluding a forced or liquidation sale (FASB, 2000).

Furthermore, Statement of Financial Accounting Standards (SFAS) 157 (par 5) identifies fair value as "the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date" (FASB, 2008: par 5).

The above definitions point out that there is some conformity concerning the objective of fair value measurement. The estimation of market price is the reason behind the fair value measurement. Nevertheless, the definitions differ in respect of the type of market price (exit price, entry price, or both) in terms of which the definition of fair value is concerned. Exit price is the criteria used by SFAS 157 to define fair value. Additionally, IAS 37 refers

to fair value as the price at which an asset can be exchanged and the exit price for a liability. Alternatively, Staff of the Canadian Accounting Standards Board (2006, par 134-135) takes the stand that there should not be any disparity between price of exit and price of entry of the same assets and liabilities in efficient markets, and, hence, defines fair value in terms of exchange price. Conceptually, when applied to fair value measurement, entry and exit prices are the same. Since the objective of fair value measurement is to estimate the market price in an arm's length transaction between market participants, what is entry price to the buying participant is exit price to the selling participant.

### 2.9.4 Importance of fair value

The fair value concept has gone through a series of debates. Generally, IFRS 13 lays down fresh conditions to measure fair value (Volha, 2010). Nevertheless, it does not present direction regarding when fair value should be used. IFRS 13 is not applicable to IAS 17 Leases, IFRS 2 Share-based Payment and measurements that have similarities to fair value, but that are not fair value such as "net realisable value" in IAS 2 or "value in use" in IAS 36 (Volha, 2010: 17-18). However, the tendency towards the application of fair value accounting has raised contentious issues, both for practitioners and for academics. The debate is more often than not concerned with financial instruments. Academics critical of fair value argue that its usefulness has not been established; it leads to less efficient investment decisions; it is subject to more manipulation; it is not reliable; it may encourage larger unpredictability; and also produces deceptive information (refer Ball, 2006; Liang & Wen, 2007; Plantin & Sapra, 2008; Rayman, 2007; Ronen, 2008; Watts, 2003).

However, proponents argue that fair value is an enhancement on historical cost accounting being made up of lesser unpredictability; adds to improving efficiency of firms; provides stronger signals of financial distress; provides more appropriate information; promotes precision; etc. (refer Bleck & Liu, 2007; Barlev & Haddad, 2003; Gigler et al., 2007).

Barth and Landsman (1995) conclude that in perfect and complete markets a fair value accounting-based statement of financial position reflects all information that are

significant. On the other hand, in more pragmatic market situations, the discretion of management to fair valuation may detract from the relevance of the statement of financial position and the income statement. This means that empirical research has mainly focused on relevance and has also been mainly applied to financial instruments.

Further to this, Barth and Landsman (1995) found that fair value-based earnings and capital are more volatile than historical cost within a sample of banks. The IAS 41 introduced fair value for all biological assets in agriculture, which entailed a major change from established accounting practices in the sector and brought the debate into the agricultural accounting domain.

### 2.9.5 Importance of fair value to users of financial statements

Information is said to be relevant if it is able to influence the economic decisions of users by enabling them to evaluate past, present or future events or by confirming, or correcting, their past evaluations (IASB, 2009b:82). The information about the current level and structure of asset holdings has value to users when the users endeavour to predict both the ability of the entity to take advantage of opportunities and its ability to react to adverse situations (IASB, 2009b:82).

According to Argiles, Bladon, and Monllau (2008), the use of fair value does not indicate any evidence of differences in profitability caused by accounting manipulation. Accordingly, farm cash flows are not less predictable with fair valuation than with historical cost. Argiles et al. (2008) concluded that there are no differences in the relevance of accounting information brought about by fair valuation. As a result of the nature of agricultural activities, it is not feasible to expect accurate and reliable cost calculations. Farmers also often perceive accounting procedures as unnecessary, other than for tax purposes. Accordingly, farmers prefer to use a simplified model such as an average of insurance companies' valuations to estimate the value of biological assets.

### 2.9.5.1 Reliability

Reliable information is devoid of mistakes and prejudices, and users may depend on it to faithfully represent that which it either purports to represent or may reasonably be expected to represent (IASB, 2009a). However, not all relevant information is reliable. In

their comment on the discussion paper on fair value measurement, Ernst and Young (2007) raised the question as to the reason why exit price may provide more useful information about the timing, amount and uncertainty of cash flows than the value in use of the relevant asset, unless the asset is held for sale. Another concern was in a situation where the highest and best use of an asset is different from current use, in which case the asset is valued at alternative use. According to Ernst and Young (2007), this alternative use may involve other assets and obligations, and there is a stacking of assumptions. The reliability of fair value estimates using models does not depend solely on how well a model reproduces conventional market pricing processes, but also on the reliability of the model's data inputs. The model of fair value should consider both inputs and assumptions that marketplace participants would use. In their response to the discussion paper on the fair value reporting of biological assets, Deloitte and Touche (1997) noted that the standard for the reliability of fair value measures as proposed was not sufficiently rigorous and that fair value constitutes a reliable measure only if:

(i) The asset is ready for conversion into cash;

(ii) There is high assurance of realisation of the asset;

(iii) Ready market exists for the asset; and

(iv) The market price of the asset is ready to be determined.

Deloitte and Touche (1997) again observes that in the absence of any of these conditions, assets should be measured at cost. D'Souza (2008) mentions further that in spite of the fact that fair valuation may, at times, be subjective and display a degree of possible unreliability to the values, such values are still tremendously useful in terms of decision-making because they represent the economic certainty as opposed to an accounting "fiction" in the form of historical cost. Accordingly, unlike the historical model, it is comparatively difficult to use fair value to make decisions.

Chasan (2008) also stated that the critics of fair value argue that it provides a pragmatic view when there is availability of price quotes, but when markets do not exist, or there is a disappearance of markets at the time of credit crunch, companies are under obligation to apply complex mathematical models to come up with values that may be just as

confusing to investors. In his citing of the multibillion-dollar write-downs on sub-prime-related asset-backed securities and the other hard-to-price assets that companies such as Citigroup Inc and Merrill Lynch & Co Inc posted, Chasan (2008) notes that fair value is not worth the earnings volatility it creates.

### 2.9.5.2 Comparability

The IASB (2015: par 7) defines comparability in the exposure draft as that value of information that assists financial statement users to recognise differences and similarities between two sets of economic phenomena. Uniformity and comparability should not result in any impediment in the implementation of accounting standards as they are dissimilar. It is essential that accounting policies be continuously reviewed for both relevance and reliability with full disclosure of any change and the effects of such changes. D'Souza (2008) argues that fair value is a market-based measure that is not affected by factors specific to a particular entity; and, therefore, it represents a balanced measurement that is reliable from one period to another and across entities. The fair value, according to D'Souza (2008), would in that respect appear to augment comparability.

### 2.9.5.3 Understandability

There is an assumption that users have a reasonable knowledge of business and accounting and that they are willing to learn information with realistic assiduousness. Nevertheless, information that is relevant for the users of financial statements to take economic decisions should not be excluded from the financial reports as a result of the complexity of such information on the grounds that it will result in misunderstanding (IASB, 2009b). In an endeavour to enhance understandability, D'Souza (2008) notes that fair value measure eliminate the hundreds of rules underlying historical cost accounting. D'Souza (2008) further argues that in order to remove control of the reported numbers from corporate management, it should be required that the reported numbers for assets and liabilities be reported on a fair value basis. The revenues, expenses, gains and losses are accounting constructs and, thus, the starting point of eliminating manipulations must be assets and liabilities. The statement of comprehensive income should then reflect the movement of these assets and liabilities.

**2.10 IAS 41 Agriculture and IFRS 13 Fair Value Measurement**

As already discussed in chapter one, IAS 41 Agriculture and IFRS 13 Fair Value Measurement were issued in April 2012 by the International Accounting Standard Board (IASB, 2012a). IFRS 13 implementation commenced on 1st January 2013 in prescribing accounting standards for agricultural activities – the management of the biological transformation of biological assets (living plants and animals) into agricultural produce. A key reform introduced in IAS 41 is the requirement of the fair valuation of biological assets, "from initial recognition up to the point of harvest" (IASB, 2012:1).

Traditionally, little attention is devoted to the accounting practices of the agricultural activities (Maina, 2010). In February 2011, the Institute of Chartered Accountants of Scotland published a study implementing fair value accounting in the agricultural sector, which illustrates that "harmonisation of farm accounting practices" does not exist when comparing financial information between the United Kingdom, France and Australia (Elad & Herbohn, 2011:1). Fair value accounting on biological assets is an old concept that was brought on by the development of IAS 41 and the related Generally Recognised Accounting Practice (GRAP) 101, with the actual determination of fair value remaining a subjective matter.

Munjanja (2008:23) mentions that a guide on fair value accounting was not available during the implementation of the standards of IAS, whilst a definition of fair value merely related to the "amount at which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's length transaction". The IASB realised that the lack of guidance of the concept of fair value accounting resulted in misunderstandings and various interpretations of fair value accounting. On this note, IFRS 13, *Fair value measurement*, which was issued in May 2011, served as a guide for the preparers of financial statements on the fair value accounting (IASB, 2011a: par C1).

 Maina (2010) stated again that the first comprehensive agricultural accounting framework in Australia was developed with a planned effective date of 2001. The accounting principles and the reporting requirements of the framework were responsible for the

difficulties experienced by the firms to establish how the required information needed to be implemented and how the framework had to be obtained. The framework was reviewed and amended to narrow the accounting requirements in order to establish a standard to specifically address the accounting treatment of the agricultural activities only with an effective date of 1 January 2005 (Maina, 2010:33).

Agricultural accounting specific guidance was provided in the Statement of Position (SOP) 85-3, Accounting by agricultural producers and agricultural cooperatives from as early as 1985 in the United States of America (Maina, 2010:36). The transformation of accounting standards in the application of uniform principles on the accounting of biological assets can thus be considered to be a universal area of concern. The IASB recognised that issues on agricultural reporting and the possible solutions to these issues needed to be documented and a standard approach adopted. Because agricultural activity and biological asset reporting was excluded in the total scope of the International Accounting Standards, "producers" of agricultural products were not governed by the statement on inventory, IAS 2 (IASB, 2011c: par 3) and the naturally regenerative resources such as forests were not included in the scope of IAS 16, Property, plant and equipment (IASB, 2011d: par 3).

The descendants of livestock and the increase in agricultural products due to biological transformation were not regarded as revenue in terms of IAS 18. The regenerative natural resources such as forests were excluded from the definition of investment property (IAS 40). According to (Maina, 2010), all these factors call for a single standard that will deal with the treatment of biological assets in financial reports. As the biological transformation of biological assets alters the substance of the relevant asset, it became a priority for the IASB to develop an accounting standard to enhance a uniform accounting model rather than the application of traditional country specific accounting practices (IASB, 2015:par B1–B7).

However, IAS 41 was developed by the IASB as, from the above detailed considerations, the initial measurement of biological assets; the recognition criteria; the subsequent

measurement and financial reporting on these biological assets had to be standardised (IASB, 2015:par B1–B7). Processing any agricultural harvested goods subsequent to the actual harvest of the biological asset has specifically been excluded from the scope of IAS 41 (IASB, 2011: par 3) since the statement on inventory, IAS 2, handles the accounting treatment of inventories. Biological assets are either ready for sale in the current condition or will be used in the process of the production of other outputs at the point of harvesting. In both instances, the definition of inventory (IASB, 2011: par 13) is met and the harvested agricultural product will be classified as such. The harvested goods shall be measured in terms of the requirements of IAS 2 (IASB, 2011: par 13) as the lower of the cost of the goods or the net realisable value. As the cost of the biological asset at the point of harvest is measured at fair value less cost to sell (IASB, 2011e: par 12), the value of the biological assets harvested (IASB, 2011: par 13) and derecognised on the financial records will be equal to the inventory recognised.

IFRS 13 principles are projected to boost the uniformity and comparability of fair value estimates in financial reporting (IASB, 2015). The standard is applicable to all fair value measurements as and when it is permitted by IFRS, with a number of exclusions. IFRS 13 is also applicable to measurements; for instance fair value less cost to sell is on the basis of fair value. Conversely, fair value is inapplicable to measurement bases that are comparable to, but are not anticipated to symbolise, fair value, such as value in use. IFRS 13 set up a particular meaning of fair value for the purpose of financial reporting (IASB, 2015). In addition, IFRS 13 presents an outline for the application of fair value definition. This necessitates various disclosures in the financial statements through the use of fair value measurements. The requirements incorporate valuation techniques and financial theory, except that the focus is solely on how these concepts are applicable in the determination of fair value for the purpose of financial reporting. The question of *what* to measure at fair value is not described by IFRS 13. The IASB takes into consideration matters surrounding *what* to measure at fair value and *when* to measure items at fair value on the basis on project specifics. Other IFRSs decide what items must be measured at fair value, and when. IFRS 13 addresses *how* to measure fair value. The principles in IFRS 13 will provide the IASB with a consistent definition for determining

whether fair value is the appropriate measurement basis to be used in any given future project (IASB, 2015).

Although globalisation will necessitate the international harmonisation of accounting practices, it is possible that fair value accounting might reduce the comparability of financial statements. In the absence of an actual transaction in an active market, the IFRS 13 Fair Value Measurement requires the use of a "hypothetical transaction in the most unavailability of accurate market data and the volatility of sentiment-driven market prices may complicate the application of the "most advantageous market" (IASB, 2009:7). Elad (2004:632) states that in the absence of an active market, "the use of subjective judgments by practitioners in establishing estimates of fair value, such as the market price for similar assets, or net present values, might result in different treatments that hamper comparability and harmonisation." The requirement, in terms of the IASB (2009:23-54), is that changes in fair value will be recognised directly in the statement of comprehensive income. It should also elicit a different reaction as was noted by Ernst and Young in the following somewhat unorthodox implication of the standard in their comment letter that "it is counterintuitive that an agricultural enterprise could literally sell nothing and still report earnings" (IASC, 2000: 229). IAS 41 calls for all firms, regardless of agricultural activities undertaken, to measure biological assets at fair value at each period of the position statement instead of measuring on the basis of historical cost. Nonetheless, the implementation of fair value reporting by small and medium-sized entities is claimed to result in various challenges for both the user and for those preparing financial statements (Maina, 2010).

Dowling and Godfrey (2001) conducted a study on the method of measurement unveiled in the 1999 annual reports of Australian firms which were in possession of self-generating and regenerating assets and concluded that even though the Australian Accounting Standards Board (AASB) 1037 prescribed the net market value approach, a diversity of measurement methods had been used, with historic cost being the most preferred method. In the same way, research carried out in Europe indicates a limited application of

fair value and noted particularly that "where companies are given an option as to whether to use cost or a fair value model, they typically choose a cost model" (ICAEW, 2007:12).

According to Jarnagin (2008:1268), the American Institute of Certified Public Accountants (AICPA), in April 1985, issued the only industry *Statement of Position (SOP) 85-3, Accounting by Agricultural Producers and Agricultural Cooperatives* as a specific guidance for agricultural activities. This statement prescribes the accounting treatment for inventories, development costs of land, perennial crops, and breeding livestock, and, in the main, advocates historical cost as an appropriate asset measurement basis, except in rare circumstances in which realisable value may be considered as an alternative.

## 2.11 Fair value implementation challenges in the agricultural sector

Fair value reporting has faced a number of challenges and controversies, and it has been widely criticised for taking away the verifiability of financial statements and replacing this verifiability with the so-called "market voice" (Elad, 2007:7). This may explain the reason why despite the proclaimed simplicity of fair value reporting, most farmers, if given the choice between fair value and historical cost, would prefer either historical cost or a modest blend of the two.

The World Bank Group (2007) mentions that a major concern is the way in which to contain the price volatility of agricultural produce, to improve access to markets and to develop modern market chains in order to reduce the cost of market access of small and medium-sized entities. Nevertheless, in view of the fact that such fair value models are proposed from the perspective of the developed countries the implementation of the fair value model faces numerous challenges in developing countries.

The United Nation Conference on Trade and Development (UNCTAD) (2002) found the need for common ground since reliable, transparent and comparable financial information is deemed necessary for growth and development in general, as well as in terms of attraction of foreign direct investment and for successful privatisation. Since 2008, companies have been asked to make use of International Financial Reporting Standards

(IFRS) in Ghana. These have been promulgated by the Institute of Chartered Accountants of Ghana (ICAG). ICAG has made an effort to raise awareness of the need to apply IFRS, but has done less to build accountant and auditor capacity (World Bank, 2010).

Researchers agree that there could be IFRS implementation problems in practice which could give rise to unintended consequences (Kothari & Lester, 2011; Laux & Leuz, 2009). Therefore, some of the fair value implementation challenges that SMEs in the agricultural sector in Ghana may face are discussed below:

### 2.11.1 Cultural and religious practices

Gibson (2005) states that modernisation and globalisation sometime progress through exploitation by governments, companies, and individuals of land; through cultural practices; religious customs; traditional knowledge; or the biological assets of traditional societies. Despite the influences of modernisation, communities in certain areas still continue to make use of biodiversity for cultural purposes and they remain associated to their surrounding environment. This cultural practice may be reflected in a number of ways; for example, Ghana is characterised by a multiplicity of ethnic groups and languages. More than 50 ethnic groups are identifiable and each has its own vernacular. Apart from English, Twi is the most widely spoken language by the Akans (Gibson, 2005).

The Akan group consists of Eastern, Ashanti, Central, Brong-Ahafo and some parts of the Western and Volta Regions. Twi is seen as the informal "lingua franca" of the country. Hausa is a language popularly spoken by "Northners" who reside in the Northern part of Ghana. The various groups of people have their unique culture which is celebrated by their traditional arrangements. The chiefs of each group see to the maintenance of law and order in their localities. Traditionally, the office of the Chief is vested in some corporate bodies. In most parts of the Southern regions of the country, the family groups descend from matrilineal ancestors, while those in the Northern parts of the country descend from patrilineal ancestors (Gibson, 2005).

Among certain tribal groups, it is a taboo to consume specific kinds of fish. For instance, it is a taboo to consume *Clarias* species among the Dagombas of the Northern Region and the Tongu-Ewe of Lower Volta. Ghana does not have a comprehensive document of these taboos, and for that reason species that are most suited for aquaculture and culture-based fisheries development are generally acceptable, with tilapia being favoured less as compared to *clarias* (Gibson, 2005). Tilapia in its fresh form is not extensively developed and, especially in the Northern part of the country, information for treatment of fish is inadequate; for this reason, their cultural practices distort the market factors (Gibson, 2005).

### 2.11.2 Enforcement of accounting standards

The use of IFRSs remains largely voluntary in some countries. In certain countries, such as Australia and China, the accounting standards are integrated with the legal systems, thus making their application mandatory for all companies. According to the Committee of European Securities Regulations (CESR) (2002), the harmonisation of the system of enforcement is a valuable device with which to create both a level playing field and an efficient capital market. The IASB (2006a) outlines the enforcement criteria in the following hierarchy:

(i) The primary responsibility to prepare and to publish IFRSs compliant financial
    statements rests with management;
(ii) The auditors have the sole responsibility for stating whether or not the financial
    statements comply with IFRSs; and
 (iii) It is the responsibility of the securities commissions to protect both investors and
    lenders by ensuring that companies publish the correct IFRSs compliant financial
    statements (IASB, 2006a).


Kothari (2000), Ball (2001), and Benston (2003) opined that accounting standards are fruitless instruments of regulation on their own. The authors made it clear that for accounting standards to provide useful accounting for capital markets, necessary mechanisms for implementing and enforcing standards are also significant. This implies that high quality financial reporting will boost the confidence of investors in financial

reports as the financial reports will show a true and fair view of the state of affairs of the firm. According to these authors, the perception of truthful reporting will add to the value significance of financial accounting information of the companies of that country. Hope (2003) expressed that the accuracy of forecast is correlated to strong enforcement of accounting and related rules. This implies that managers are encouraged by enforcement to stick to approved accounting rules, thus reducing the doubt from analysts about future earnings.

Enforcement mechanisms were classified by Saudagaran and Diga (2000) into preventive and punitive enforcement mechanisms and are defined as ex-ante and ex-post enforcement methods. Mechanisms of enforcement of standards need to be instituted before enforcement action can take place. Preventive arrangements were defined as mechanisms that promote and facilitate compliance, and punitive arrangements as mechanisms that force compliance or lead to penalties for non-compliance (Saudagaran and Diga, 2000). In lieu of this, preventive methods relate to regulations relating to the responsibilities, authorities and activities of the auditor and supervisory body to thwart illegal accounting activities in the capital markets and offer a constructive environment to generate excellent financial reporting. A punitive method refers to the means by which the accounting standards are enforced by the specialised accounting and supervisory bodies and sanctions applicable to firms that fail to comply (Saudagaran & Diga, 2000).

Benston, Bromwich and Wagenhofer (2003) raised the argument that for firms to have good financial systems, excellent universally tolerable accounting standards and successful enforcement mechanisms have to be in place concurrently. First class accounting standards with general recognition and useful enforcement mechanisms are needed to generate a favourable atmosphere for investors to make rational decisions (World Bank, 2000). In order to ensure compliance with accounting standards, enforcement mechanisms should be in place (Zeff, 1988). Kothari (2000) and Rahman (2000) argued that the value of accounting standards and their enforcement will determine the worth of accounting information.

Zeff (1995) stated that there is an alliance between a standard setting body of the private-sector and that of a government regulatory body. Ball (2001) disagreed that a well-

organised system of public financial reporting needs a lot of institutional description such as qualified and autonomous auditors, an autonomous body in charge of standard setting, in addition to a constructive and self-regulating body in charge of enforcement. According to Ball (2001), these characteristics jointly resolve information asymmetry inconveniences between the preparers of financial statements and their users. The Securities and Exchange Commission (SEC) (2000) also agreed that such features add to the acceptability, superiority and implementation of accounting standards. In a country with a high quality accounting regulatory environment, the investors who evaluate financial reports of firms from that country will perceive the reports as truly reflecting the firm's fundamental conditions and this will be reflected in the prices of equities (SEC, 2000).

According to La Porta, Lopez-de-Silanes, Shleifer and Vishny (1998), enforcement of law serves as an important tool to persuade the firm's ability to raise funds from external sources.  Guenther and Young (2000) also confirm the usefulness of legal frameworks in the implementation of IFRS.  The authors mentioned that countries with strong legal frameworks will be able to enforce compliance with IFRS. Klapper and Love (2002) as well as Hope (2003) also placed more emphasis on the enforcement aspect of the IFRS. With this, evidence relating to the important role of legal enforcement on forecast accuracy and earnings was provided. An emphasis was placed that the regulatory environment of accounting directly deals with the quality of financial accounting information. The accounting regulatory environment consists of acceptability, quality, and enforceability of accounting standards. With stringent measures to enforce accounting standards, smooth implementation and high quality accounting information will be the end product (Hope, 2003).

Weak enforcement mechanisms of countries that have adopted IFRS will result in the reduction of financial reporting quality, even when high quality accounting standards are implemented (Brown & Tarca, 2007; Chen & Cheng, 2007). It is questionable if these conditions are well developed in the current environment of Ghana.

### 2.11.3 Availability of active commodity markets and derivatives
According to the African Union (2005), the commodity markets in most developing countries have been characterised mainly by information asymmetry and price

manipulation. As a result of the nature of agricultural produce, farmers are aided significantly by commodity futures in order to time supply and demand. This is particularly true in instances where the agricultural produce comprises perishables and storage facilities are inadequate.

A commodity exchange signals opportunities to traders for profitable price arbitrage through regional trade, and provide farmers with a better opportunity to choose their cropping patterns in order to meet market demand. This means that a commodity exchange is able to act as catalyst for more valuable agricultural products and investments in terms of physical market infrastructure; for example, grading facilities, information systems and warehousing structures (IFPRI, 2008).

However, an article appeared on the front page of Ghana's Daily Graphic on 17 April 2012 mentioning that if a commodity exchange is set up, it will serve as a lifeline for the Ghanaian farmer. It was admitted that a commodity exchange, with all its predetermined features, is a vital institute that can bring clearness and vital information to a variety of stakeholders. However, the establishment of a commodity exchange should not be considered as a solution to the numerous and diverse challenges facing the agriculture in Ghana (Available online: http://presidency.gov.gh/node/472).

President John Dramani Mahama stated on 25 February, 2014 in his second State of the Nation address that the government has put measures in place to set up the Ghana Commodity Exchange (GCX) and its Warehouse Receipt System (WRS). President Mahama mentioned this move "as part of efforts to create a methodical, translucent and resourceful marketing system for Ghana's agricultural commodities". According to him, this will again help to encourage agricultural investment and augment productivity. This will also help to promote access to markets and reasonable returns for smallholder farmers and to make the formalisation of informal agricultural trading activities possible. It was emphasised that the setting up of the Ghana Commodity Exchange will serve as a hub for West Africa Regional commodity trading activities. The initial phase of GCX will start as a spot and future trading of

primarily agricultural commodities, including maize, soybeans, paddy rice, palm oil and groundnuts, Agricultural and non-agricultural commodities will also be introduced as a platform for future trading. Nonetheless, the nonexistence of a commodity market in Ghana affects more or less all the SMEs in the agricultural sector in Ghana. As a result, these SMEs do not have adequate information on market price and technology. Additionally, due to inadequate capital formation, SMEs in the agricultural sector are not able to be listed on the Ghana Stock Exchange (Available online: http://presidency.gov.gh/node/472).

However, President Mahama launched the Ghana Commodities Exchange project in 2016. President Mahama mentioned that this initiative will help to transform Ghana's agriculture through the establishment of the first modern commodity exchange. It was mentioned during the launching that the project is expected to become operational in 2017. It was again stated that the establishment of this market will impact the lives of millions of Ghana's small scale producers and all others in the marketing chain (Available online: http://www.ghana.gov.gh/index.php/media-center/news/1522-ghana-launches-gcx-to-boost-agriculture).

### 2.11.4 Capital markets in Ghana

Notwithstanding the global financial crisis, the Ghana Stock Exchange (GSE) was the best performing capital market in Africa in 2008 (World Bank, 2010). From December 2005 to June 2010, the composite index of the GSE increased by 38 per cent and the number of listed companies also grew from 29 in March 2005 to 37 in January 2011(World Bank, 2010). Conversely, the GSE remains illiquid with a low free float (less than 5 percent of the market capitalisation) and a narrow investor base. The market is also concentrated in a small number of companies: the top five companies represented over 88 percent of the market value in June 2010. Market capitalisation rose by over 11 times from GH¢ 1.3 billion (US$ 1.4 billion) in 2003 to over GH¢ 15.9 billion (US$11.0 billion) (78.9% of GDP) in 2009 (World Bank, 2010). The significant increase in the market capitalisation was largely due to cross listings. Anglo Gold Ashanti, cross listed on five other stock exchanges, accounted for 77 per cent of the market capitalisation in 2009. Gold Star Resources and Ecobank Transnational Incorporated (ETI) are cross listed on

two other exchanges. Overall, the cross listings account for a significant percentage of the market capitalisation (World Bank, 2010). The market capitalisation of domestic companies increased from GH¢ 1.3 billion in 2003 to GH¢ 3.9 billion as at June 2010, with large fluctuations within the period (i.e. a 95 percent increase from 2005 to 2006 and a 24 percent decrease from 2008 to 2009), partially due to the impact of the financial crisis. While the overall market has been growing, market capitalisation and turnover remain low when compared to other stock exchanges in the region. A number of major companies remain unlisted, including both state owned enterprises and local companies (World Bank, 2010).

On the other hand, studies of capital market expansion confirm sturdy relationships between the legal and financial infrastructures of a country and also, the maturity of its capital market. In a study of 49 countries, using data from 1994, La Porta, Lopez-de-Silanes, Shleifer and Vishny (1997) found that countries that have worse investor protection (measured by both the quality of law enforcement and the character of legal rules) have smaller and narrower capital markets. In a related study, La Porta, Lopez-de-Silanes, Shleifer and Vishny (1998) opined that countries that have common law in place have the strongest legal protection of investors. Countries where the French civil law is in place have the weakest legal protection of investors. The German and Scandinavian civil law countries are somewhere amid (La Porta, et al., 1998).

Jackson and Roe (2009) also conducted a study on the relationship between legal activity and capital market development. The argument was that both private enforcement and public enforcement are vital for market development. It was noted that a number of countries that practise common law utilise mechanisms typically experimented in civil jurisdictions.

Leuz, Nanda and Wysocki (2003) conclude that the legal and institutional environment of a country manipulates the properties of reported earnings. They find that outsider economies (those with dispersed ownership, large stock markets, strong legal enforcement and strong investor rights) feature lower ownership concentration, larger

stock markets, more extensive outsider rights, higher disclosure, and strong legal enforcement than insider economies.

Frost, Gordon and Hayes (2006) identified that the power of a stock exchange's exposé system (disclosure, monitoring and enforcement of financial information) is positively associated with market development, after controlling the legal system; legal protection of investors; market size; and other relevant factors.

## 2.11.5 Knowledge on the part of the preparer of financial statements

According to the IASB (2009a), management is in charge of the preparation and presentation of financial statements. Accordingly, the level of financial reporting knowledge on the part of management goes a long way in determining the content of the financial statements. Most small and medium-sized entities are managed by owners who may not have the necessary skills for preparing financial statements. A study conducted by the Professional Oversight Board (POB) (2006) found that the limited financial expertise available in many small businesses in the United Kingdom caused such businesses to turn to external accountants for assistance. Although management may depend on consultants, the opinion of any expert depends on the information provided by the owner-managers.

Argilés and Slof (2000) noted that the accounting standard on agriculture presented an acceptable conceptual framework for professional accountants only. However, in respect of farmers, it was unlikely to provide any assistance in overcoming the barriers to the implementation of farm accounting practices or change the economic and managerial limitations of farmers. Argilés and Slof (2000) proposed an enhanced mechanism for transferring the accounting, economic and managerial knowledge to farmers. It was also mentioned that farmers are of the opinion that the merits gained from financial statements are not benefits of accounting reports and do not overshadow the expenditure incurred to prepare them.

Rules of IFRS are based on principles. The application of IFRS necessitates explanations and opinions, which, consecutively, need circumstances such as knowledgeable and

efficient managers; self-determining auditors; accountants; extensive investor protection laws; and professional systems of law enforcement. Nevertheless, the current environment of Ghana does not have these conditions as the Ghana National Accounting standards and the Companies Code 1963 (Act 179) do not provide guidance on how to account for agricultural and biological assets.

## 2.11.6 Cost of the preparation and presentation of financial statements

The cost of the preparation of financial statements is cited as one of the main limitations of financial statements (IASB, 2009c). The balance between cost and benefits has also been the subject of various debates. One point of perspective is to focus on the information that management uses internally to manage the business (IASB, 2006a). However, it may not always be the case that the information which management uses will be either sufficient or appropriate for external reporting purposes. In addition, the question arises as to whether the information that management does not need would actually be useful. Any disclosure that requires management to reformat existing information in a slightly different way compounds the cost of presenting financial statements (IASB, 2006b). Nevertheless, those setting standards as well as the drafters and users of financial statements should be aware of this constraint (IASB, 2009c).

## 2.11.7 Changing user information needs

It is widely acknowledged that financial statements currently aim to meet the needs of too many types of users whose needs are dynamic. The IASB and the FASB have jointly embarked on a major project to redefine the users of financial statements (IASB, 2008). According to these joint boards, the focus is shifting to the providers of capital and to the information they need in order to make their resource allocation decisions and assess the stewardship role of management. The Financial Reporting Council (2009) suggests that regulators and companies should reconsider the way in which they address the needs of stakeholders other than capital providers. This may help to eliminate the complexity of financial statements as the user information requirements differ from one situation to another. In order to address these situational disparities, many experts have advocated principles-based accounting standards as opposed to rule-based standards (Schipper, 2003).

## 2.11.8 Lack of available valuation techniques

The application of various principles of accounting by comparable firms might be owing to the lack of guidance from the ICAG (2010). The ICAG gives entities the explanation parameter publications and outlines explicit requirements concerning the public sector financial reports. Guidance and industry norms are however not channelled to public firms as a guide for estimation method and accessible techniques (ICAG, 2010). Internal auditors and, possibly, experts are required to review the assumptions and estimates, and detailed in a customised policy. Furthermore, the techniques and assumptions applied are not circulated to related entities to lay down an industry standard. Unreliable fair values may be determined due to the lack of guidance when experts fail to support the public entity to determine a basis for the calculations. As mentioned earlier, the Ghana National Accounting standards and the Companies Code 1963 (Act 179) do not provide guidance on how to account for agricultural and biological assets (ICAG, 2010).


## 2.11.9 Diversity of agricultural activities

According to Sullivan (2003), diversity is a key issue in agriculture in a range of different ways: within-field diversity (intercropping or mixed cropping is perceived as preferable to monoculture), diversity in crops and livestock (several crop and livestock types are perceived as better than only a few), production diversity (mixed farming is perceived as more harmonious than specialized farming) while organic farms with a diversity of activities (both agricultural and non-agricultural) are perceived as desirable in connection with short market chains. Most SMEs engage in agriculture as a traditional and subsistence activity, in terms of which the surplus only is available for sale. In other developments, farming takes place within a traditional land system with sentimental attachment to certain activities. The interdependence of such activities where the outputs of one activity constitutes the inputs to another activity without relevant market pricing complicates the valuation of the related biological assets (Sullivan, 2003). Mixed farming and crop rotation practices as soil fertility management are prevalent in most small and medium-sized entities (Sullivan, 2003).

These traditional practices also rely on natural ecological systems which are subject to the impropriety of nature such as drought, and thus, increasing uncertainty in the valuation of biological assets. The notion of the improved internal function of the farm with higher diversity has been documented (Sullivan, 2003). For example, more efficient nutrient recycling on farms with crops and livestock production, improved resource efficiency by grazing more types of animals and crop rotations decrease the risk of pests and diseases. In addition, the diversity of income generating activities beyond the agricultural production increases the stability of the farm by risk dispersion for most farmers (Sullivan, 2003).

### 2.11.10 Level of awareness
The adoption of IFRS (IASB, 2009c) and its repercussions for those who prepare and use financial statements, educators, supervisory bodies and other interest groups have to be successfully synchronised and be in touch. It takes into consideration the creation of knowledge on the possible effect of the adaptation, the recognition of regulatory synergies to be derived, and the exchange of momentary effects of the transition on business performance and financial position. The functioning of IFRS needs significant groundwork to ensure consistency and present lucidity on the influence that IFRS will have on existing countrywide laws (IASB, 2009c).

### 2.11.11 Accounting education and training
Realistic implementation of IFRS 13 demands enough scientific ability amongst those who prepare and use financial statements, auditors and regulatory authorities. Countries that have implemented IFRS encountered a diversity of issues relating to capability. One of the major challenges Ghana may come across in the realistic implementation process may be the shortage of auditors and accountants who are technically knowledgeable in IFRS implementation (ICAG, 2010). Typically, there is inadequate time to train individuals to gain knowledge to apply the international standards during adoption. It is the responsibility of accounting professionals to see to it that IFRS is implemented successfully. Along with these accountants, financial analysts, officials of government, auditors, tax authorities, accounting lecturers, regulators, stock-brokers, information officers and preparers of financial statements are inclusive in the process of IRFS adoption (ICAG, 2010). IFRS training materials may be inaccessible at reasonable cost in

Ghana to educate those groups of people who face challenges in the adoption of IFRS (ICAG, 2010).

## 2.11.12 Taxation reporting

The issues of taxation in relation to the conversion of IFRS are multifaceted (IASB, 2009c). IFRS implementation needs a comprehensive re-examination of tax laws and administration. Explicit rules of taxation should be restructured to address these adjustments. For instance, laws of taxation which bound taxation relief losses to four years should be reconsidered (IASB, 2009c). This is due to the fact that losses that may arise as a result of transition adjustments may not be recouped in four years (IASB, 2009c).

## 2.11.13 Existing laws

In Ghana, the practices of accounting are overseen by the Companies Code 1963 (Act 179), and the Ghana Accounting Standards issued by the ICAG and other existing laws such as Securities and Exchange Commission Regulations (2003), the Securities Industry Law (1993), and Banking Act (2004). All these provide some guidelines on the preparation of financial statements in Ghana. IFRS does not recognise the presence of these laws, and the accountants have to follow the IFRS fully with no prevailing provisions from these laws (ICAG, 2010). Ghanaian law makers may have to make necessary amendments to ensure a smooth transition to IFRS.


## 2.12 Summary and conclusions

The agricultural sector is an important part of the global economy. However, agricultural accounting and implementation guidelines in the agricultural sector may still be lacking. Most countries have defined SMEs by using quantitative criteria like assets, revenue, number of employees or some other. In contrast, the IASB has focused on qualitative aspects to define small and medium-sized entities as entities that publish general purpose financial statements although they lack public accountability. The literature revealed that the majority of accounting pronouncements and standards for the accounting of biological assets are off-centred in favour of fair value and historical cost less accumulated depreciation and impairment losses, which is applicable only in situations in which it is not possible to obtain reliable estimates of fair value. It again revealed the effects,

advantages and cost or disadvantages of implementing IFRS. The summary of the effects of implementing IFRS include: improved market liquidity, increase in profitability ratios and improvement in accounting quality.

The literature also revealed that proponents of fair value argue that fair value provide more relevant information to the decision makers by reflecting the reality of the market dynamics. It is also argued that fair values are more comparable than cost because they take away the "manager's voice" and give the "market voice". It has also been ascertained that IAS 41 and IFRS 13 increase the financial reporting comparability of firms in the agriculture sector.

The adoption of IFRS in different countries has resulted in drastic transformation in the practice accounting of major agricultural firms by changing from historical cost to fair value. The literature revealed the main implementation challenges of fair value to be the following: the cost of recognising biological assets at fair value exceeds the gains obtained by this evaluation method; the method of fair value described in IAS 41 increases the unpredictability of earnings; selecting a discount rate for the evaluation of biological assets involves subjective judgment; high cost burden; lack of skilled accounting personnel; ignorance or low knowledge levels about IFRS; and weak regulation and enforcement procedures. However, IAS 41 remains the consistent first step of a transition to fair value assessment in the agricultural sector. In Ghana, the agricultural sector remains the backbone of the economy, occupying traditionally an important place in the national economic structure.

Nevertheless, IAS 41 is not directly reflected in the Ghanaian regulations. The implementation of fair value for SMEs in the agricultural sector would increase the quality of accounting. Again, fair value implementation by SMEs is often a challenge for countries, especially for the transition countries such as Ghana. Moreover, the system of accounting in Ghana has moved towards IFRS implementation in order to gain access into international markets. But as the literature has revealed, some challenges are faced

by countries in Africa and elsewhere. Chapter four of this study identifies whether Ghana faces the same or similar challenges.

# CHAPTER 3
# RESEARCH DESIGN

## 3.1 Introduction

Chapter 2 reviewed the historical perspective of fair value accounting and implementation challenges facing countries in Africa such as Kenya, South Africa and Nigeria that have implemented IFRS. This chapter commences with the description of the research, scope of the study, whereafter the research design and methods most appropriate to answer the research questions are explained. The chapter concludes with the discussion of the limitations and ethical considerations applicable.

## 3.2 Research scope

There are many SMEs spread across Ghana. This study was limited to a selected number of agricultural entities in the Ashanti and Western regions of Ghana. There are ten regions in Ghana but it is noted that these two regions are dominated by small and medium scale farming. The Ashanti and Western regions of Ghana were considered because they are the hub of agricultural activities. Also, for the purpose of cost and convenience, these two regions were suitable for this study because they are very close to each other. This study was conducted on owners/managers and accountants of SMEs in the agricultural sector within the two regions of Ghana (Ashanti and Western regions).

The study also considered the regulatory bodies with respect to financial reporting in Ghana such as the Institute of Chartered Accountants Ghana (ICAG), Ghana Stock Exchange (GSE), Chartered Accountants in audit firms, Stock Exchange Commission (SEC), Ghana Revenue Authority (GRA) and Ghana Audit Service (GAS). These regulatory bodies were considered because ICAG is responsible for the issuance of national accounting standards which regulate the preparation of financial statements by various entities in the country; and Chartered Accountants in Audit firms offer professional services like audit and assurance, tax and consultancy. Again, this study considered both "small" and "medium" entities that have 29 or fewer employees with plant and machinery (excluding land, buildings and vehicles) not exceeding 10 million Ghana cedis.

## 3.3 Research design

Research design is a plan or outline for conducting a meaningful study (Burns & Grove, 2003). It sets the outline for collection, measurement and analysis of data (Burns & Grove, 2003). It is a comprehensive sketch of how an investigation will come to pass. A research design usually takes account of how data is to be collected, what instruments will be employed, how the instruments will be used and the intended means of analysing the data collected (Burns & Grove, 2003). A research design has been defined as the general approach taken in an inquiry (Creswell 2003: 216). Twumasi (2002) mentions that the initial step for sample selection is to take into account the sampling design. This indicates all the means and the procedures involved in getting the respondents. This study considered the respondents' experience, age, educational qualification, and their income levels as the sampling criteria. The data collection and analysis approach was quantitative design in order to utilise statistical information gathered from the proposed research instruments as well as to make a variety of subjective assessments of similar research data. Furthermore, this decision is supported by the rationale of availing the merits of a quantitative approach. Eldabi, Irani, Paul, and Love (2002) explained that the basic objective of a quantitative approach is to gain understanding and measurement from the relevant data gathered. Hence, a quantitative approach was desirable in order to achieve statistically significant results.

## 3.4 Research methods

Mouton (2002:36) referred to methodology as a plan to apply a variety of standardised techniques and methods in the methodical hunt for knowledge. This comprises the plan for data collection which spells out the thorough approach for data collection. The collection of data is the most important part of any study. The selection of methods for data collection depends generally on the decision of which type of data is required for a specific method of study (Ghauri & Gronhang, 2005). There are three comprehensive means of data collection, namely the qualitative, quantitative and mixed methods (Saunders, Philip & Thornhill, 2009). Qualitative data is often obtained by collecting, analysing and interpreting data by observing people; the observation is unstructured and, thus, it might be subjective (Saunders, Philip & Thornhill, 2009). Even though this method reduces objectivity, it is more flexible to allow the researcher to better explore the subject

matter. This method is extremely significant in situations where prior knowledge about the subject is weak because it aims at understanding the subject (Saunders, Philip & Thornhill, 2009). Quantitative research often involves the use of structured questions where response options are predetermined (Ghauri & Gronhang, 2005). Lastly, the mixed method is a combination of quantitative and qualitative research methods (Saunders, Philip & Thornhill, 2009). It allows the researcher to benefit from the advantages of the two comprehensive means of data collection. When both are used strategically, it may help the researcher to minimise the disadvantages of both the qualitative and quantitative methods (Burns & Bush, 2000).

Golafshani (2003:600) argues that those who conduct quantitative research seek fundamental willpower, guess, and generalisation of findings whilst those who conduct qualitative research look for clarification, indulgence, and extrapolation to similar situations. Here the focus is more on an attempt to comprehend a condition that would otherwise be mysterious or disturbing (Eisner, 1991:58). No method or technique is preferable to the other but the research problem and its purpose will determine the most preferable method or technique (Pervez & Kjell, 2010). Research quality is not the basis to differentiate between quantitative and qualitative study, but the modus operandi makes the distinction. In qualitative research, statistical method or any other procedures of quantification are not used (Pervez & Kjell, 2010). An additional distinguishing feature is that a quantitative study uses measurement while qualitative does not (Pervez & Kjell, 2010).

Qualitative research requires skills and experience to analyse data. The skills needed to conduct a qualitative study are thinking conceptually, stepping back and analysing situations, recognising and keeping away from prejudices, obtaining valid and reliable information, having theoretical and social sensitivity, being able to keep analytical distance while utilising past experience, and having a sharp sense of observation and interaction (Pervez & Kjell, 2010). According to Malhotra and Briks (2003), quantitative research is suitable for measuring both attitudes and behaviour. Occasionally, the qualitative method is added to the quantitative method to help researchers understand

their findings better (Saunders, Philip, & Thornhill, 2009). For the purpose of this study, the quantitative approach is adopted. The adoption of the quantitative approach helped the researcher to seek for views and opinions from both the preparers and the regulatory bodies towards the fair value implementation challenges. Both primary and secondary methods were used in collecting the necessary data or information needed.

### 3.4.1 Primary data

Rodson (2002) referred to primary sources of data as data that will be collected with expressed and explicit reason. The primary data was obtained from the field. According to Bordens and Abbot (2011), a primary source of data includes the purpose of the study, its participants or subjects, materials or apparatus, procedure, results and references. The primary data collection methods are experiments, observations, interviews and surveys (questionnaires) (Pervez & Kjell, 2010). Primary data is more reliable with research questions and research objectives (Pervez and Kjell, 2010). Both primary and secondary methods are used in this study. Primary data is advantageous because it helps to obtain exact and reliable information. Specifically, questionnaires will serve as a source of primary data. The primary methods in this study were based on closed-ended and open-ended questionnaires, which were pretested only on accountants and regulatory bodies to ensure that the questions could be acceptable, answerable, analysable and applicable. Data was collected from respondents at their convenience.

### 3.4.2 Secondary data

Secondary data is information collected by others for purposes that can be different from one research to another (Pervez & Kjell, 2010). Secondary data facilitates the understanding of the research problem and how such a problem can be solved. Secondary data comprises books; journal articles; websites of government, companies, semi-government; and catalogues (Pervez & Kjell, 2010). Pervez and Kjell (2010) mention two main types of secondary data namely internal sources and external sources. Internal sources include information on employees, customers, marketing plans, competitors and suppliers. External sources include published books, journal articles, and primary data (Pervez & Kjell, 2010). Bordens and Abbot (2011) are of the opinion that secondary data can also be obtained from web pages,

journals, articles and newspapers. The secondary sources of data used in this study include online journals, periodical data bases, newspapers, other published research projects, and literatures on IFRSs.

### 3.4.3 The population

Twumasi (2002) stated that in considering a sampling design, the researcher should first and foremost determine the population universe. The researcher must be able to define the parameters of the population of the study. The population is a compilation of all items, whether of people or objects of events, that are to be considered in a given problem situation. These items refer to the total objects needed for the purpose of drawing conclusions (Saunders, Lewis & Thornhill, 2009). This is the complete set of cases from which a sample is drawn (O'Leary, 2005). Obalola (2010) asserts that studies are not conducted in a vacuum, but in a population. In a few instances, it could be possible to gather and analyse data from every possible instance of a population. Nevertheless, this is impracticable in most situations due to the limitations of time, accessibility and money (Saunders, et al., 2009). According to Saunders, Lewis and Thornhill (2007), no matter what the research question and objectives are, it is essential to consider whether to use sampling. According to Yin (2009), the population represents the entirety of the items or units on which the study is conducted. Sampling enables the compilation of data from only a subgroup rather than all possible cases. The subgroup of the population is known as the sample. This provides an alternative means of accessing the subjects and using the result of the data unruffled to make generalisation on the population (O'Leary, 2005). In this study, the population was addressed as the number of accountants and regulatory bodies of SMEs in the agricultural sector which have adopted IFRS 13/IAS 41 and are located in both the Ashanti and Western regions of Ghana. The population for this research is made up of two groups, namely;

(i) Accountants on the SMEs in the agricultural sector: According to the Ministry of Food and Agriculture (MoFA, 2015), the total population of the agricultural sub-sector in both the Ashanti and Western regions of Ghana is represented on table 3.1 below:

Table 3.1: Total population of SMEs

| Sub-sector | SMEs population (Ashanti & Western regions) |
|---|---|
| Livestock and Fisheries | 25 |
| Food crops | 20 |
| Forestry | 22 |
| Horticulture | 15 |
| Industrial crops | 21 |
| Total | 103 |

Source: MoFA, 2015

(ii) Regulatory bodies: According to the ICAG (2015), the number of licensed Chartered Accountants in audit firms operating in the Ashanti and Western regions of Ghana is 20. Additionally, the study will target two officers each of the Institute of Chartered Accountants Ghana, Ghana Stock Exchange (GSE), Stock Exchange Commission (SEC), Ghana Revenue Authority (GRA) and the Ghana Audit Service (GAS).

### 3.4.4 Sample size

It is generally impossible to study every member of the population in research. Therefore, a number of researchers do triumph over this complexity in circumstances where the study population itself is small and also not spread far apart geographically. Representative samples are thus prescribed and accepted in any scientific study in order to address the challenge of access to the complete population.  A sample is a small group of a target population that is selected for inclusion in a study (Mugenda, 2008). As it is not viable to capture the entire target population, a representative sample is drawn to display the same characteristics as the target population (Booyse, et al. 2002). When dealing with people, it can be defined as a set of respondents (people) selected from a larger population for the purpose of a study. Sample size determines the accuracy with which population values may be estimated. A sample is a subset of the population in question and consists of a selection of members from the particular population (Sekaran, 2000).

However, according to Mugenda (2008:186), the specification of a sample size for a survey is largely guesswork. Where the population is homogeneous, a small sample will produce accurate estimates but where the population is heterogeneous, a large sample will provide more accurate estimates of the population parameters. According to Mugenda (2008:186), the sample size must be determined by the availability of resources and the ability of the sample to capture all sources of disparity within the population. Kothari (2004:174) stated that there are two approaches to determine the size of the sample. This study intended to generalise the implementation challenges of IAS 41/IFRS 13 of SMEs in the agricultural sector of Ghana. This would, essentially, require a large sample, but on account of limited resources, lack of listing, the scattered nature of SMEs in the agricultural sector, and the lack of similar research, a smaller sample was used to indicate the implementation challenges; and to provide a resonance basis for further research. Therefore, a sample size of 90 accountants of SMEs and 30 regulatory bodies was considered. The distribution of the sample size is shown on the table below:

Table3.2: Determination of sample size of SMEs

| Sub-sector | Characteristics | Activities | Total number of entities | Number of entities selected | |
|---|---|---|---|---|---|
| | | | | Western | Ashanti |
| Livestock and fisheries | Meat, fish and livestock products | Poultry, goats, sheep, cattle and fish | 25 | 10 | 10 |
| Food crops | Immediate consumption or staple food | Maize, wheat, sorghums, rice, millet and legumes | 20 | 10 | 10 |
| Forestry | Forestry | Timber and beam | 22 | 10 | 10 |
| Horticulture | Consumable and non-consumable | Vegetables, flowers, nuts and spices | 15 | 5 | 5 |
| Industrial | Primary cash | Tea, coffee, sugar | 21 | 10 | 10 |

| crops | crops | cane, cotton, oil palm, tobacco | | | |
|---|---|---|---|---|---|
| **Totals** | | | **103** | **90** | |

Source: Author

Table 3.2 illustrates the distribution of the sample size in respect of the various sub-sectors in the agricultural sector. As a result of the varied distribution of the target population and limited resources, a sample size of 90 farms was adopted.

Table 3.3: Determination of sample size of regulatory bodies

| Regulatory bodies | Characteristics | Activities | Total number of regulatory bodies | Number of regulatory bodies selected | |
|---|---|---|---|---|---|
| | | | | **Western** | **Ashanti** |
| Chartered Accountants in audit firms | Licensed chartered accountants in audit firms | In charge of auditing financial statements for listed and unlisted entities | 20 | 10 | 10 |
| Institute of Chartered Accountants Ghana (ICAG) | Accounting regulatory body | Regulating and enforcing financial reporting laws | 1 | 1 | 1 |
| Ghana Stock Exchange (GSE) | Listed companies market | In charge of all listed companies in Ghana | 1 | 1 | 1 |
| Stock Exchange Commission (SEC) | Listed companies regulator | Regulates the stock exchange market in Ghana | 1 | 1 | 1 |

| Ghana Revenue Authority (GRA) | Revenue mobilisation authority in Ghana | In charge of revenue mobilisation in Ghana | 1 | 1 | 1 |
|---|---|---|---|---|---|
| Ghana Audit Service (GAS). | Auditing public sector | In charge of auditing governmental and non-governmental organisations | 1 | 1 | 1 |
| **Totals** | | | **25** | **30** | |

Source: Author

Table 3.3 illustrates the distribution of the sample size in respect of the various financial reporting regulatory bodies. As a result of the varied distribution of the target population and limited resources, a sample size of 30 was adopted.

### 3.4.5 Sampling method

Sarantakos (2005) noted that analysis is considered most excellent when conducted on samples that are still fresh. Therefore, sampling is used to select a portion of the population to represent the entire population. According to Kumekpor (2002), in the course of selecting the sample, to highest degree, affects the degree to which a sample is representative of the universe from which it is selected. Hence, it is essential to determine appropriate methods of selecting samples that give reasonable average results and also make it possible to estimate the degree of representativeness.

The technique by which a sample is selected is called sampling techniques (Struwig & Stead, 2013). Yin (2009) made it clear that there exist two different types of sampling techniques. Firstly, probability sampling is where the sampling units are chosen by possibility. It is likely to pre-specify each possible sample of a given size that could be drawn from the population, as well as the probability of selecting each sample (Saunders, Lewis & Thornhill, 2007). Secondly, non-probability sampling

relies on the personal judgment of the researcher rather than on chance to select sample elements.

The researcher can randomly or wilfully make a decision on what elements to take account of in the sample (Saunders, et al., 2007). According to Saunders, et al. (2007) as well as Struwig and Stead (2013), non-probability sampling is made up of quota, purposive, snowball, self-selection and convenience sampling. In quota sampling, the population is alienated in a number of sub-groups based on which the researcher purposely chooses a number of contestants in every group (Yin, 2009). In purposive sampling which, according to Yin (2009), allows the researcher to make use of judgment to pick cases that will best make it possible to present answers to research questions and to meet objectives. Snowballing is a non-probability sampling technique in which an initial group of respondents is selected randomly. Subsequent respondents are selected based on the referrals or information provided by the initial respondents (Yin, 2009). Last but not the least is convenience sampling. In this technique, the researcher chooses the sample according to its associations and its capacity to examine the members (Yin, 2009).

Therefore, the type of sampling used in this study is non-probability sampling based on purposive sampling. Purposive sampling is restricted to specific types of people who can make available the desired information; for instance, accountants from agricultural farms, regulatory bodies, and auditors from public accounting firms (Sekaran, 2003). A purposive sampling method was considered because there was no access to a full listing of all the units in the target population as required under probability sampling (Mugenda, 2008). The study selected the accountants working in the agricultural farms, regulatory bodies of financial reporting, and auditors in the Ghana Audit Service as the samples.

The research problem of this study was of a technical nature and, thus, the study engaged the expert sampling method in respect of each category. Expert sampling, according to Mugenda (2008:198), is a branch of purposive sampling that involves identifying the respondents who are likely to provide certain information. This study was interested in small and medium-sized entities that publish financial statements. In view of the fact that the small and medium-sized entities that publish financial statements are not

listed, this study also employed the snowball sampling technique, also known as the chain referral sampling method, to complete the questionnaires.

### 3.4.6 Questionnaire design

A questionnaire is a sequence of questions given to the sample group to ascertain information which is statistically useful about a given topic. When a questionnaire is properly constructed and administered responsibly, it serves as a vital instrument through which a statement can be made in relation to precise people, groups or total populations (Babbie, 2004:239). According to Babbie (2004:239), a questionnaire is a document which contains questions and other types of items intended to plead for information suitable for analysis. Questionnaires are used primarily in a survey research but also in experiments, field research as well as other modes of observation (Babbie, 2004:239).

According to Black (1999:215), quantitative research questionnaires in the social sciences are more often than not prepared with the intention of being working definitions of concepts, instruments that replicate potency of thoughts, discernments, views and opinions.  Questionnaires are commonly used in social research (Black, 1999:215). They are important means of soliciting for a broad series of information from a large number of respondents. The success of every survey depends greatly on good construction of the questionnaire. Unsuitable questions, erroneous ordering of questions, inaccurate scaling, or bad questionnaire layout may lead to worthless survey, as the views and opinions of the participants may not be perfectly reflected. Pre-testing among a smaller subset of target respondents is a useful method for checking the appropriateness of a questionnaire research (Black, 1999:215). There were two questionnaires in this study, both with open and closed questions.

Therefore the two sets of questionnaires were pre-tested on SMEs in the agricultural sector in both the Ashanti and Western regions of Ghana. Holloway and Wheeler (2002:80) stated that pilot studies are not usually used in qualitative studies but novice researchers could conduct interviews as a pre-exercise to get used to the type of data collection. A pre-exercise was done to orientate the researcher to the research project and provide the researcher with insight into the phenomenon. A pilot study ensures that

errors can be rectified at little cost (Holloway & Wheeler, 2002:80). The pilot study was conducted with two participants who met the selection criteria. Both were accountants in agricultural firms and regulatory bodies. A sample size of 20, consisting of ten accountants from SMEs in the agricultural sector, five from chartered accountants in audit firms, and five from the regulatory bodies was used in the pilot study. The 20 participants in the pilot study were part of the sample size. No changes were made in the questionnaire after the pilot study. This research was conducted at their respective workplaces. Body language and non-verbal responses in addition to the manner of asking questions were considered during the exercise. This enhanced the researcher's level of confidence. As the researcher was the main data collection instrument, the pilot study increased the researcher's experience of responding to the participants' questions as well as interpersonal skills.

The study used closed-ended or structured questions and open-ended questions for the two sets of the questionnaires. A structured or closed response questionnaire specifies alternatives for the respondents. The current study adapted an existing questionnaire. The questionnaire items were adapted from a previous study in Kenya (Maina, 2010). However, in view of the time constraints, a questionnaire was considered more appropriate. The questionnaire was administered personally. A personally administered questionnaire provides the researcher with an opportunity for follow up, and it establishes contact with the respondent. The study used closed-ended or structured and open-ended questions. Such responses are categorised as dichotomous, multiple-choice, checklist and ranking (Cooper & Schindler 2003:373). Vivid explanations to each question were given where necessary in order to guide the respondents in terms of the technical areas of the study. Open-ended questions were considered as these require respondents to express ideas on a particular issue in their own words (Cooper & Schindler, 2003:375). McBurney and White (2004:239) stated that open-ended questions allow respondents to provide more complete answers and to reveal the reasoning behind their answers. However, they are both time consuming and costly for the respondent, and they may also result in a lower response rate. Majumdar (2005:255) is of the view that open-ended questions are appropriate only when testing a respondent's attitude, belief, understanding, or recollection of a past experience in terms of which individual responses

may show a high degree of variation. For this reason, this study wanted to find out the accountants' level of understanding of IFRS, fair value and its implementation challenges facing the SMEs in the agricultural sector of Ghana. Therefore, in this study, open-ended questions were used.

The questionnaire was preferred because it was easier to administer and analyse. It is economical in terms of time and money. The questionnaire was divided into four sections (i.e. section A to D). Section A asked the respondents' demographic characteristics, including gender; personal qualification; and years of working experience. Section B asked the respondents to determine their understanding of IFRS and opinion towards the implementation of IFRS 13 fair value measurement such as IFRS objectives, advantages and challenges. Section C asked the respondents the objectives in preparing financial statements. Section D asked the respondents closed-questions of the Likert-type scale, where responses ranging from 1 (Strongly Disagree) to 5 (Strongly Agree) were used within each question. This scale was used to measure the level of agreement or understanding of the items. The questionnaires (refer Appendixes A and B) were distributed personally.

### 3.4.7 Data collection

Data was collected personally from the accountants of the SMEs operating in the agricultural sector as well as the licensed audit and accounting firms in the Ashanti and the Western regions of Ghana. Data was also gathered personally from the executive directors of the ICAG, GSE, SEC, GRA and GAS. Self-administered questionnaires were used to collect the data. The data collected was in line with the fair value implementation challenges facing SMEs in the agricultural sector of Ghana. The data collected was inspected and edited from each element of the sample.

### 3.4.8 Data analysis method

Emery and Couper (2003) are of the view that raw data obtained from research is useless unless it is converted into information for the purpose of decision making. Data analysis refers to methods employed to minimise, systematise and assign meaning to data (Burns & Grove, 2005). Data analysis depends significantly on statistical analysis tools in studies that are quantitative in nature. In spite of the types of data unruffled and the orientation of

the researchers, data analysis is normally made up of two steps: a summary of the results and an interpretation thereof (Stommel & Wills, 2004). Preparation of data refers to examining or sorting the data into the computer. Data is also checked for accuracy and transformed. A database structure that integrates the various measures is developed and documented (Trochim, 2006). The data should be precise, absolute and appropriate for additional investigation (Sekaran & Bougie, 2010). The researcher has to document and organise the data and subsequently use a variety of descriptive and inferential statistics or econometrics concepts to give explanation to the data and draw assumptions (Saunders, Lewis & Thornhill, 2009). If an inappropriate statistical technique or econometrics model is chosen, it may lead to wrong interpretations. This may in turn result in failure to solve the research problem and answer the research questions. Lind, Marchal and Wathen (2008) stated that researchers can employ several descriptive statistical impressions to describe data such as frequency distributions or cumulative frequency distributions, frequency polygons, histograms, various types of charts like bar charts as well as pie charts and scatter diagrams.

### 3.4.8.1 Pie charts
A pie chart is a way of summarising a set of categorical data. A circle is divided into segments, with each segment representing a particular category. The area of each segment is proportional to the number of cases in that category (Lind, Marchal & Wathen, 2008:23). Pie charts are generally considered to be the most illustrative method of presenting categorical data and it is for this reason that it has been adopted for the purpose of this study. Also, the use of graphs will help in the comparison of responses from various respondents (Lind, Marchal & Wathen, 2008:23). The plotting of graphs was done by the use of Microsoft Excel Spreadsheet.

### 3.4.8.2 Data interpretation
The interpretation of the data collected is analysed by the use of statistical tools such as tables and charts. After data collection, the following steps were taken to analyse the data for the study. The data was edited to detect and correct possible errors and omissions that are likely to occur in order to ensure consistency across respondents. The data was then coded to enable the responses to be grouped into a limited number of categories. The Statistical Package for the Social Sciences (SPSS) was used in this study for the

interpretation and analysis of data. SPSS is data mining and statistical software that provides analysis for data collection. It is widely used by researchers, especially when conducting a survey. SPSS is a statistical package for performing quantitative research in social science. Other statistical computer applications that were considered included Microsoft Excel. However, SPSS was selected because it is the easiest to use for the most widely used statistical techniques (Neter, Kutner, Machtsheim & Wasserman, 1996). SPSS significantly reduces the groundwork needed to explore the data. The only constraint of SPSS is that users have no control over the statistical output and there may be a weak lag function on transforming the data across cases. SPSS was used in the ranking procedures in the questionnaire.

## 3.5 Limitations

The empirical investigation was expected to face certain challenges ranging from a small sample to a poor understanding of IFRS on the part of the respondents. Mugenda (2008) refers to limitations as those characteristics of the design or methods that set boundaries on the application or interpretation of the results. However, since this is an exploratory study, the limitations are not expected to influence the research findings and the inferences in any significant way. The limitations of the study include the following:

### 3.5.1 Small sample size

A small sample is appropriate only where the population is homogeneous and the characteristics of the population may be easily described. The agricultural sector in Ghana is extremely diverse and this factor would normally have called for a large sample that would be representative of the population. However, in view of the limited resources, all the inferences made will be based on a small sample. Majumdar (2005) argues that if the level of precision is not a critical factor of consideration, then the size of the sample does not matter.

### 3.5.2 Poor knowledge of IFRSs and the technical nature of the subject

There is a widespread belief that a land owned by extended families may not be pledged as collateral and, thus, such farms exist within a closed system and are not interested in sharing information. This may be attributed to a failure on the part of the farm owners to appreciate both the benefits of IFRSs and the adoption of IFRS.

### 3.5.3 Inaccessibility of respondents

Certain respondents identified were inaccessible as a result of both location and the scattered nature of SMEs in the agricultural sector. The inaccessibility of some of the areas was also a major constraint that confronted the researcher in unravelling the fair value implementation challenges facing SMEs in the agricultural sector. The study was also conducted during a period of harvesting of most of the biological assets, which may possibly have affected the attitude of the respondents toward fair value implementation by lowering their expectations and optimism. However, as this research was also seeking information about the accountants' expectation in respect of the impact of fair value implementation and the way in which this affects the fair values, the harvesting of the biological assets might also have resulted in their being more honest on other factors.

### 3.5.4 Inadequate finance

In addition, more areas could have been covered but funds were limited. As a result of this, the study covered two regions out of the ten in Ghana.

### 3.5.5 Poor infrastructure

Poor infrastructural development in Ghana is one of the major challenges facing the agricultural sector. Roads leading to agricultural farms in the rural areas in Ghana are very dilapidated, which made the distribution of questionnaire to the accountants very difficult.

### 3.5.6 Technology development and dissemination

The pace at which Information Communication Technology (ICT) is developing and its impact on socio-economic activities cannot be overemphasised. ICT, according to UNDP, has been defined to include the full range of electronic technologies and techniques used to manage information and knowledge. It is imperative that Ghana is not excluded from the technological revolution. It can be deduced from Ghana Cameroon Chamber of Commerce (GHACAMCC) that the use of ICT has been incorporated into almost every aspect of commerce, education, governance and civic activity in developed countries and has become a significant factor in creating wealth worldwide (GHACAMCC, 2012). Regrettably in Ghana, ICT has barely taken traction. Computer illiteracy and lack of access to ICT are widely recognised as a progressively more powerful impediment to the agricultural sector in Ghana (GHACAMCC, 2012). Rural areas in Ghana are dominated

by agricultural activities. As a result of poor power supply and recent power crises popularly called "dumso dumso" in the Akan language, which is the most widely used local dialect (meaning on and off), the usage of computers and internet facilities in the agricultural farms in Ghana are affected adversely. For these reasons, questionnaires which could have been distributed by e-mail were personally distributed.

### 3.5.7 Poor structure of agricultural sector in Ghana
The agricultural sector in Ghana is not well structured which makes it difficult to obtain reliable information. The Ministry of Food and Agriculture and the Registrar General Department websites in Ghana do not even have the list of registered agricultural companies. This situation makes it very challenging to conduct a study in the agricultural sector, and the current study is not exempted from its telling effects.

### 3.5.8 Respondents' inability to provide explanations to answers
The shortcoming of the questionnaire as a method of gathering evidence is that it does not allow respondents to explain their reasons for the answers they give. The research could have gained a further insight into the IFRS implementation challenges in the agricultural sector if respondents had been given the chance to explain their choices, especially where they disagreed.


### 3.6 Ethical considerations
The need for high ethical standards on the part of the researcher is paramount. This is necessary in order to protect the rights of the respondents. According to Resnik (2011), since research often involves a great deal of co-operation and co-ordination among many different people in different disciplines and institutions, ethical standards promote the values that are essential to collaborative work; such as trust, accountability, anonymity, confidentiality, mutual respect, and fairness.  For ethical reasons and due to the sensitivity of the study, the results did not use the actual names of the selected respondents in order to ensure confidentiality and anonymity of information to be gathered. Ethical clearance was sought from the College of Accounting Sciences Research Ethics Review Committee at UNISA before the data collection was done (copy of certificate included as Appendix D). The participants completed a letter of consent (refer Appendixes A and B) before they completed the questionnaire.

## 3.7 Summary and conclusions

The rationale of this chapter was to explain the methods of this study, describe the sample selection, explain the data collection instruments, and explain how data was analysed. This chapter described the research methods and design. The study used both primary and secondary data. Secondary data was collected from various textbooks, articles from different journals, and relevant theses. Primary data was obtained from respondents (accountants and regulatory bodies) who completed the questionnaires. The empirical part of this study was critical in helping to establish the reality in the field in order either to accept or to refute the theoretical findings.

For the purpose of this study, small and medium-sized entities were defined as the entities that publish financial statements, even though they do not have public accountability. However, in Ghana, most SMEs operate in an informal way, and this creates a challenge in the definitions of both the population and the sample design. It was for this reason that the study adopted purposive sampling techniques in order to target only those respondents who were likely to provide information relevant to the purpose of this study. The SMEs selected were those engaged in cash crops, horticulture, food crops, livestock, and fisheries. Data was also gathered from the following accounting regulators: ICAG, GSE, SEC, GRA and GAS. However, due to inadequate resources, a sample of 120 (consisting of 90 accountants from SMEs and 30 regulatory bodies) was used. The remainder of this study will involve an analysis of the findings of the empirical investigation as well as conclusions and recommendations from the findings.

# CHAPTER 4
# RESEARCH FINDINGS

## 4.1 Introduction

Chapter 3 thoroughly explained the research design, data collection method, the research instrument and the sample design. This chapter deals with the presentation and analysis of the data collected and the interpretation of the information gathered by the researcher through questionnaires administered to the various respondents in order to draw conclusions. Two sets of questionnaires, of which the responses are analysed in this chapter, were designed. One set was administered to the preparers of financial statements (refer Appendix A) and another set to regulatory bodies of financial reporting (refer Appendix B).

## 4.2 Responses

The empirical study comprised personally administering questionnaires to 90 accountants and preparers of financial statements of SMEs in the agricultural sector and to 30 regulatory bodies, bringing the total to 120. Summaries of the responses can be seen in Appendixes C and D. As SMEs in Ghana that publish financial statements are not listed, the study adopted a snowball sampling technique. The snowball sampling technique accounted largely for the high level of responses at the rate of 100%. This high response rate may be as a result of the questionnaires being administered personally since most of the respondents were willing to complete the questionnaire in the presence of the researcher and, thus, could make enquiries directly. The analysis was completed by means of the 120 completed and returned questionnaires. The respondents were supportive and the data provided was taken to be a true account of the respondents' views due to the independence of the study carried out. There was much enthusiasm with the accountants and preparers of financial statements of SMEs in the agricultural sector who appreciated this study in the field of agricultural accounting.

The regulatory bodies were also excited with the title of the study, and they stressed that a similar study has not yet been conducted in Ghana. This study is the first of its

kind. Notably, the analysis of the data was used to establish the IFRS implementation challenges facing SMEs in the agricultural sector of Ghana.

The results were analysed as a percentage of the number of respondents in the respective entities.

## 4.3 Background information

Section A of the questionnaire was to identify the background information of both the entities in the agricultural sector and the regulatory bodies of financial reporting standards. The aim was to ascertain the general information from both parties relating to the kind of regulatory bodies, nature of business, stated capital, number of employees, gross income per annum, net asset values, positions held in the organisation, level of education and other experiential information of agricultural accounting.

**Figure 4.1: Section A, Question A1***: To which of the following regulatory bodies do you belong?* The aim of this question was to establish the regulatory bodies each of the respondents belonged to in order to ensure that, at least, a representative from each regulatory body participated in the survey.

**Figure 4.1: Regulatory bodies membership**
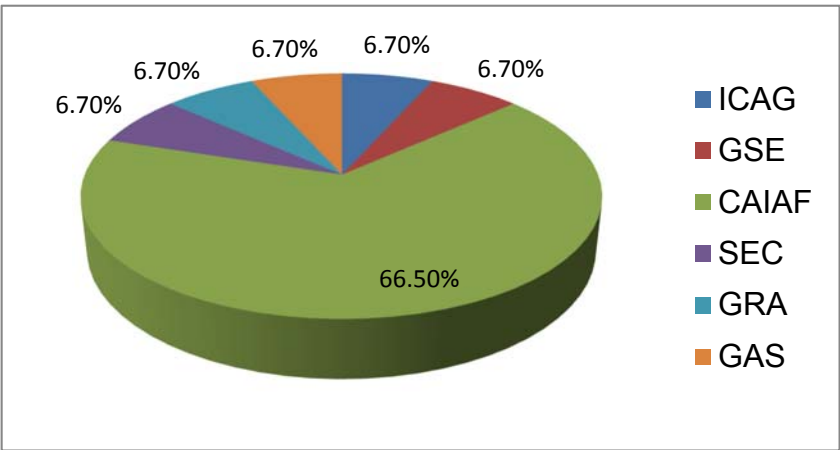


**Source: Field data, 2016**

As indicated by figure 4.1, 6.7% of the respondents were from the Institute of Chartered Accountants Ghana (ICAG), 6.7% of the respondents were from the Ghana Stock Exchange (GSE), 66.5% of the respondents were from the Chartered Accountants in Audit Firms (CAIAF), 6.7% of the respondents were from Stock Exchange Commission (SEC), 6.7% of the respondents were from the Ghana Revenue Authority (GRA), while 6.7% of the respondents were from the Ghana Audit Service (GAS). If the responses are compared with the targets (refer to Table 3.3), they reflect the entire sample size selected from each regulatory body in Ghana.

Responses from Question A2 for regulatory bodies indicated that 15 out of the total number of respondents from regulatory bodies were chief accountants, 10 were financial managers, whilst the remaining 5 indicated their position as principal auditors.

In response to Question A3 by regulatory bodies, 20 out of the 30 were professional qualification (ICAG and ACCA) holders whilst the remaining 10 were postgraduate degree holders.

*Figure 4.2: Section A, Question A1: Nature of business.* The objective of categorising the nature of business was to make sure that the sample was as representative as possible. The question aimed at establishing the kind of farming entities the respondents belong to.

**Figure 4.2: Nature of business (Responses from the accountants and preparers of financial statements)**
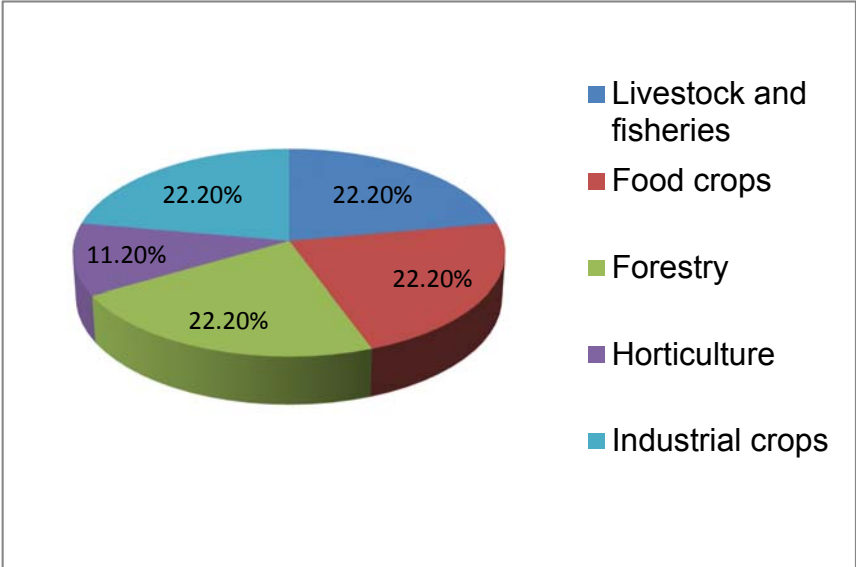


**Source: Field data, 2016**

As indicated by figure 4.2, 22.2% of the respondents were from the livestock and fisheries sub-sector, 22.2% were from the food crops sub-sector, 22.2% of the respondents were from forestry, 11.2% were from horticulture, while 22.2% were also from industrial crops. If the responses are compared with the targets (refer to Table 3.2), they reflect the entire sample size selected from each category of agricultural sub – sector in Ghana.

**Figure 4.3: Stated capital (Responses from the accountants and preparers of financial statements)**
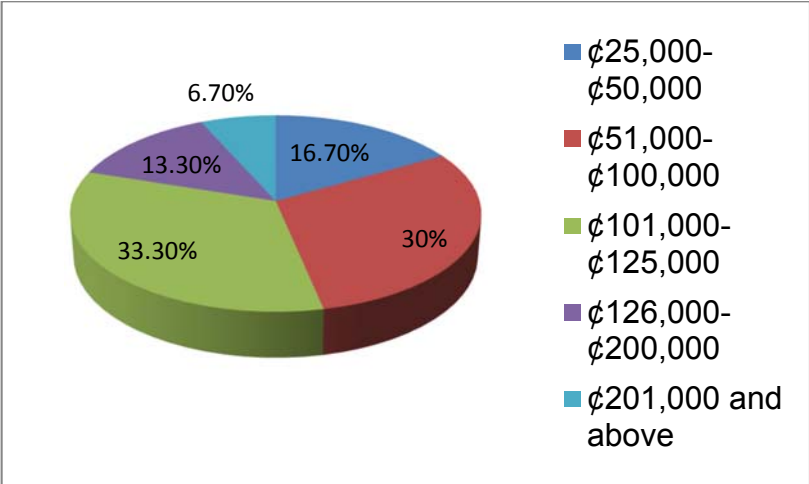
**Source: Field data, 2016**

Figure 4.3 indicates that 16.7% fall into the category of stated capital of ¢25000 – ¢50000, 30% fall within ¢51000 – ¢100000, 33.3% fall within the range of ¢101000 – ¢125000, 13.3% fall within ¢126000 – ¢200000, while 6.7% has ¢201000 and above stated capital.

**Figure 4.4: Number of employees (Responses from the accountants and preparers of financial statements)**



**Source: Field data, 2016**

According to Figure 4.4, the study revealed that, out of the 90 respondents, 7.8% had below 10 employees, 40% had 10 – 20 employees, 32.2% had 21 – 30 employees, 15.6% had 31 – 40 employees, and 4.4% had 41 and above employees.

**Figure 4.5: Gross-income-per-annum (Responses from the accountants and preparers of financial statements)**
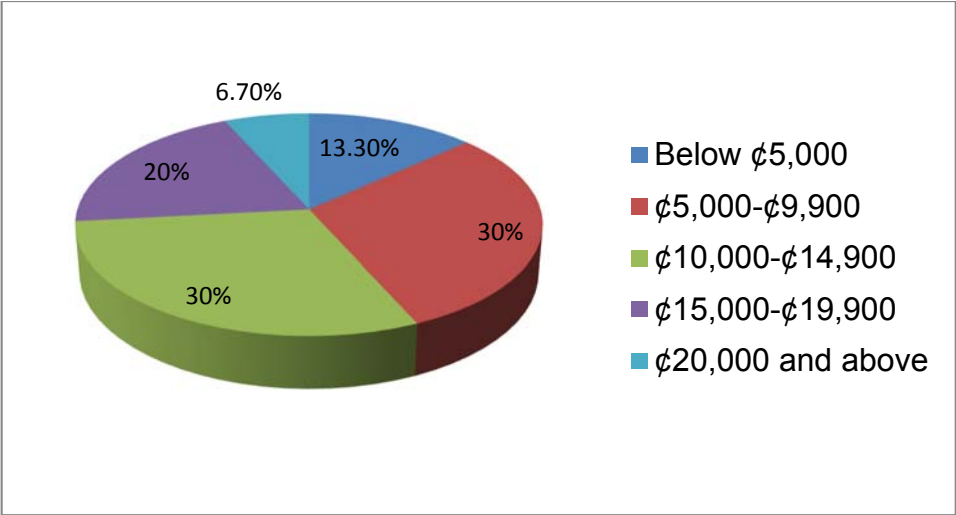


**Source: Field data, 2016**

Figure 4.5 shows that 13.3% of the respondents had a gross income per annum below ¢5000, 30% had ¢5000 – ¢9900 category, 30% fell within the range of ¢10000 - ¢14900, 20% had ¢15000 – ¢19900 category, while 6.7% had ¢20000 and above.

**Figure 4.6: Net asset value (Responses from the accountants and preparers of financial statements)**
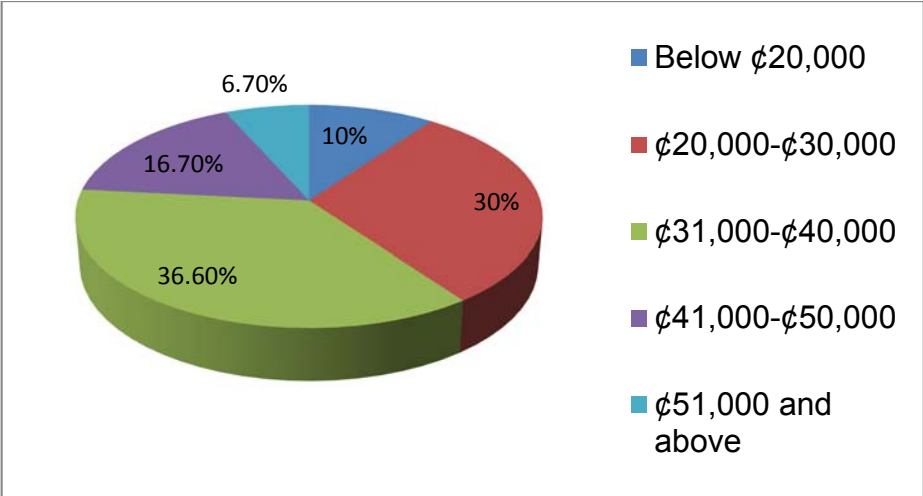


**Source: Field data, 2016**

Figure 4.6 reveals that 10% of the respondents had a net asset value below ¢20,000, 30% had a net asset value ranging from ¢20,000 – ¢30,000, 36.6% had net asset value ranging from ¢31,000 – ¢40,000, 16.7% had net asset value ranging from ¢41,000 – ¢50,000, whilst 6.7% indicated a net asset value of ¢51,000 and above.

**Figure 4.7: Position (Responses from the accountants and preparers of financial statements)**
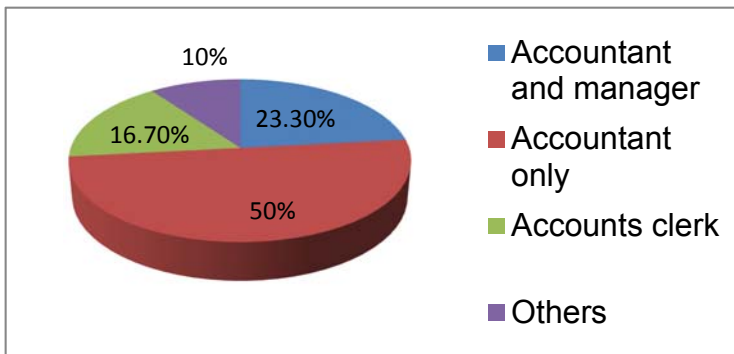


**Source: Field data, 2016**

Figure 4.7 shows that 23.3% of the respondents indicated their position in the business as manager and accountant, 50% of the respondents indicated accountant only, 16.7% were accounts' clerk, while 10% indicated other position as bookkeepers.

**Figure 4.8: Level of education (Responses from the accountants and preparers of financial statements)**
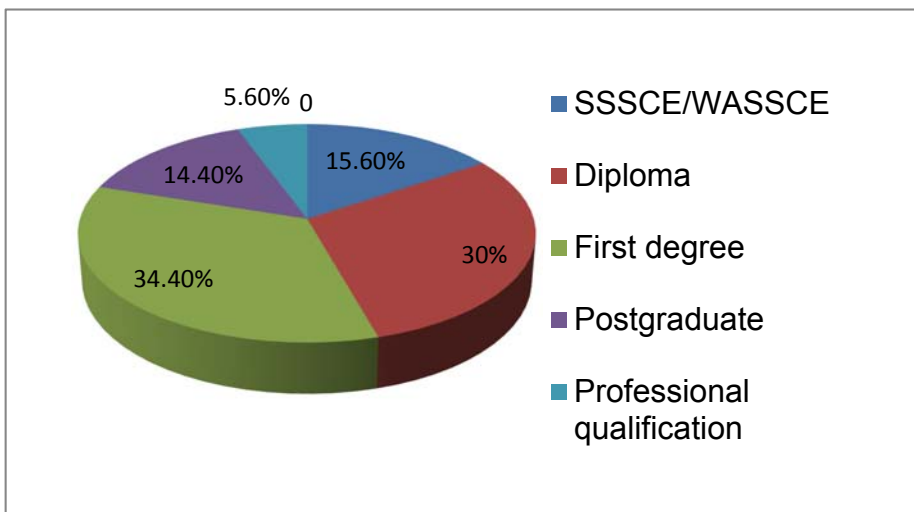
Figure 4.8 indicates that 14 (15.6%) of the respondents had SSSCE/WASSCE which is equivalent to A Level (Advanced Level), 30% were diploma holders, 34.4% had first degree, 14.4% were postgraduates while 5.6% had professional qualification.

Therefore, out of the total of 90 respondents, the results gave an overall rate of 78.9% of the respondents who had tertiary education. A higher educational level implies that people have a better understanding of the research questions.

**Figure 4.9: Section A Question A4:** *How many years have you been preparing (been part of the process) accounts for the business?* This question aimed at establishing the number of years the preparers had been preparing accounts in the agricultural sector.

**Figure 4.9 Preparing accounts (Responses from the accountants and preparers of financial statements)**
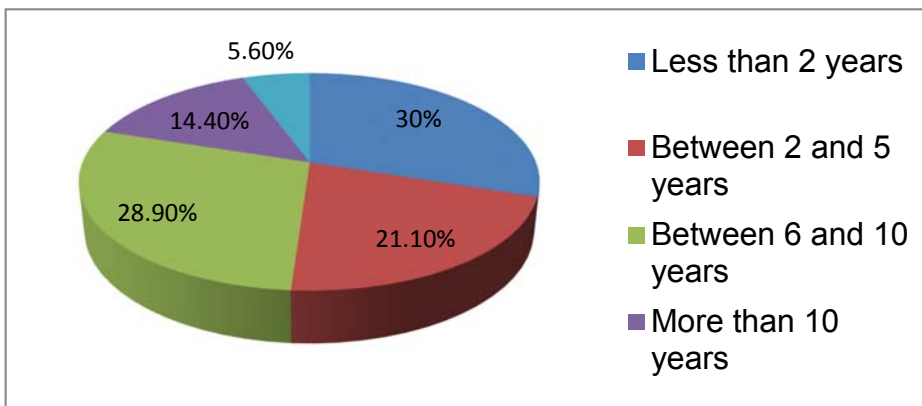
Figure 4.9 above indicates that, out of the 90 respondents who constitute accountants and preparers of financial statements, 30% had less than 2 years' experience of preparing financial statements for the business, 21.1% had between 2 and 5 years, 28.9% had between 6 and 10 years, 14.4% had more than 10 years while 5.6% had more than 15 years experience in preparing financial reports for the business.

However, the results indicated that the preparers of financial statements in SMEs in the agricultural sector of Ghana are experienced in preparing accounts.

*In response to Question A4 from the regulatory bodies,* participants were asked to mention the objectives of their office in promoting the implementation of IFRS 13, Fair Value Measurement in Ghana. About 80% of the respondents mentioned that the implementation of IFRS 13 will ensure uniformity of financial reporting to meet the international standardisation of financial reporting and to abide by the national regulations, while about 20% expressed no view on this question.

**Figure 4.10: Section A, Question A5:** *Does the broad area of agricultural accounting interest you?* The aim of this question was to determine whether preparers of financial statements of SMEs in the agricultural sector have an interest in agricultural accounting.

**Figure 4.10: Broad area of agricultural accounting (Responses from the accountants and preparers of financial statements)**
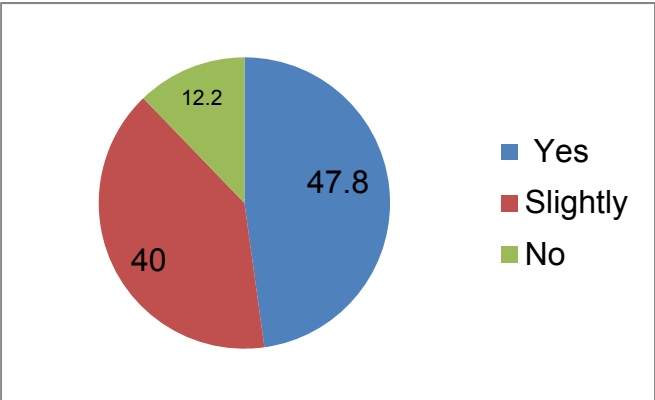


**Source: Field data, 2016**

The responses from Figure 4.10 revealed that out of the 90 respondents on whether the preparers had interest in the broad area of agricultural accounting, 47.8% indicated 'Yes', 40% stated that they had a slight interest in agricultural accounting while 12.2% indicated that they had no interest in agricultural accounting. This implies that the majority of the respondents have an interest in agricultural accounting.

In response to Question A5, the regulatory bodies were asked to mention the year in which their office initiated plans for the implementation of IFRS 13 in the agricultural sector. About 60% of the respondents mentioned that plans for the implementation of IFRS 13 were initiated in 2008, 30% mentioned 2010, while 10% mentioned 2015.

**Figure 4.11: Section A Question A6:** *How many years of your professional experience have you been part of accounting activities for agricultural entities?*

**Figure 4.11: Professional Experience (Responses from the accountants and preparers of financial statements)**
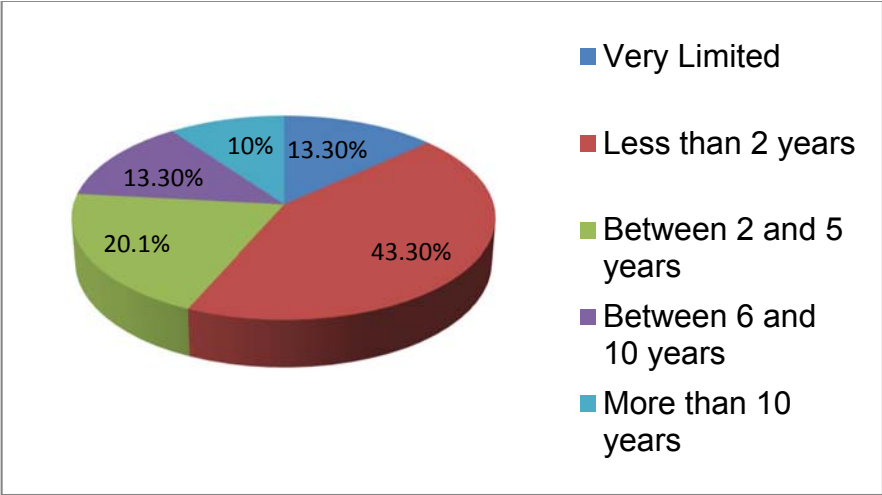


**Source: Field data, 2016**

With reference to Figure 4.11 above, 13.3% of the respondents indicated that they had very limited professional experience of being part of accounting activities for agricultural entities, 43.3% had less than 2 years, 20.1% indicated between 2 and 5 years, 13.3% indicated between 6 and 10 years whilst 10% mentioned more than 10 years. Thus, these findings indicate that the majority of the respondents have professional experience of being part of preparing the accounts of agricultural entities.

In Q*uestion A6,* the regulatory bodies were asked to list some of the activities their offices have carried out in the past to support effective implementation of IFRS 13. All the respondents mentioned that their offices have been organising seminars and

training programmes for accountants in all areas but not specifically those working in the agricultural entities. This implies that no special training, seminars and workshops are specifically organised for accountants working in SMEs in the agricultural sector.

**Figure 4.12: Section A, Question A7:** *As an accountant, identify and explain some important accounting information which you consider most important when presenting annual financial reports.*

In response to Question A7, the preparers of financial statements indicated that when presenting the annual financial reports, they consider that the reports will provide adequate information to shareholders concerning the viability and profitability of their invested capital and to take decisions in future. They also expect the financial reports to provide information to management concerning the performance of the business in order to take appropriate actions to improve the entities' results in future. They also expect the reports to provide information to creditors concerning the credit worthiness of the entities. According to them, this will help the entity to get financial support from the lenders and suppliers. They also indicated that the reports should provide information to the tax authorities to determine the credibility of the tax returns filed by the entities.

**Figure 4.12: Section A, Question A8:** ***When did the business adopt IFRS?***
**Figure 4.12: Adoption of IFRS** (Responses from the accountants and preparers of financial statements)
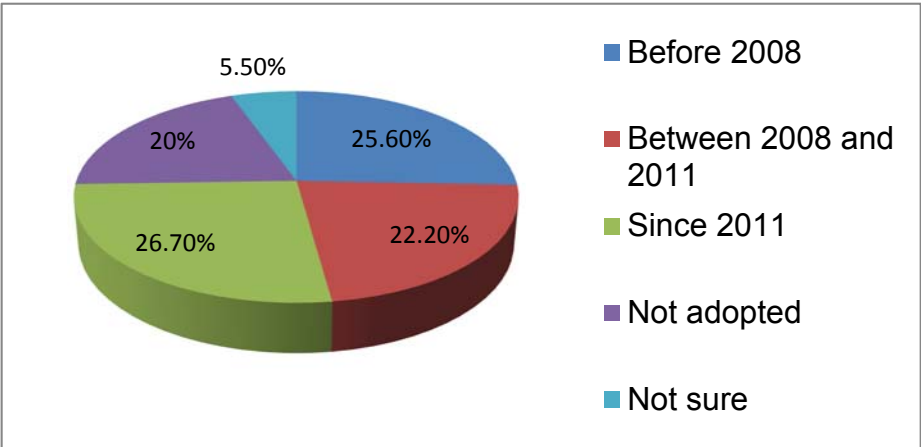
**Source: Field data, 2016**

Figure 4.12 shows that 25.6% of the respondents indicated that IFRS was adopted before 2008, 22.2% indicated the adoption was between 2008 and 2011, 26.7% adopted IFRS since 2011, 20% mentioned that IFRS had not been adopted, while 5.5% responded that they were not sure.

**Figure 4.13: Section A, Question A9:** *Has the business implemented the IFRS 13, Fair value measurement?*

**Figure 4.13: Implementation of IFRS (Responses from the accountants and preparers of financial statements)**
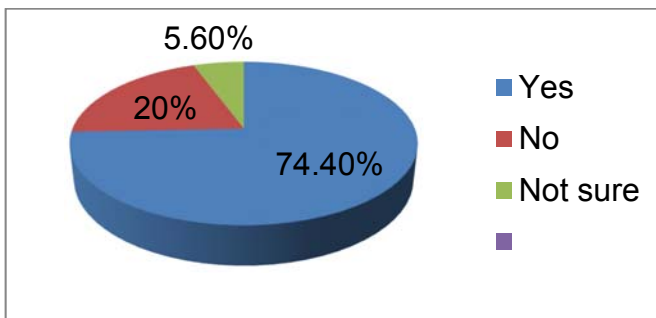


**Source: Field data, 2016**

Figure 4.13 establishes that 74.4% of the participants responded 'Yes' which indicates that IFRS 13 has been implemented, 20% of the respondents responded 'No' to the question, while 5.6% responded 'Not sure'. In response to Q*uestions A9 and A10*, those who responded 'Yes', to the question mentioned that when implementing IFRS 13, the following difficulties were encountered: lack of education and training, too complex to understand, and lack of information on market prices of agricultural produce. Those who also responded 'No' to the question gave similar reasons.

**4.4 Farm profile**

This section (Section B) of the questionnaire to the accountants concentrated on the profile of the farming activities. The main aim of this section was to emphasise the fact that farming activities which may influence the farming methods are varied.

**Figure 4.14: Section B, Question B1:** *Which one of the following best explains the type of farming operations?* The aim of this question was to establish who owns the farming entity.
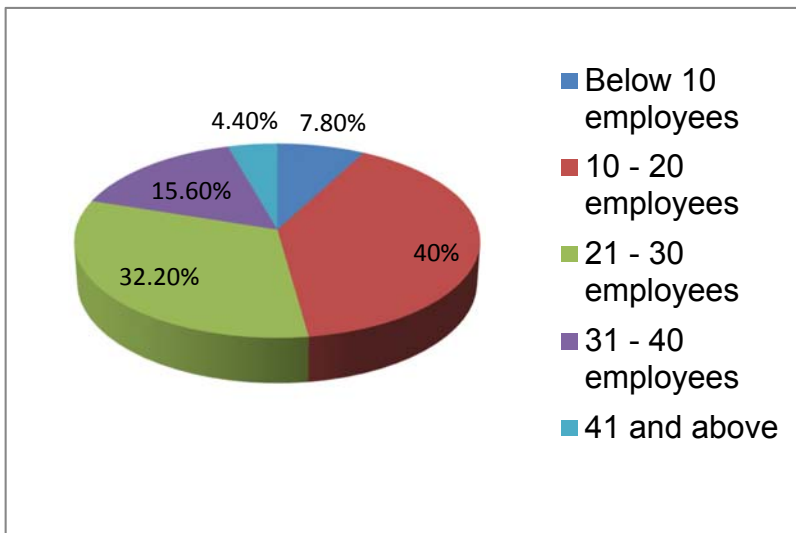
**Figure 4.14: Type of farming operation (Responses from the accountants and preparers of financial statements)**
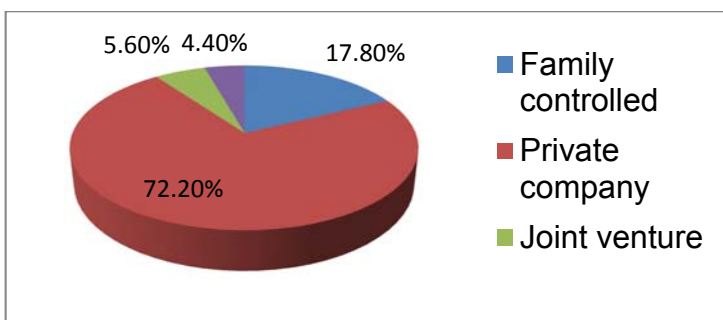


**Source: Field data, 2016**

Figure 4.14 indicates that 17.8% of the respondents stated the type of farming operations as family controlled, 72.2% of the respondents indicated the type as private company, 5.6% were joint ventures whilst 4.4% respondents indicated other such as partnership. The findings clearly indicate that the majority of the entities in the agricultural sector of Ghana are privately owned. This finding is contrary to the assumption that most SMEs are family controlled. Maina (2008) in Kenya also affirmed the same fact that most SMEs are private companies.

**Figure 4.15 Section B, Question B2:** *Which of the following best explains the main farming activities?* In Ghana, farming activities are categorised into five groups namely: industrial crops; horticulture; food crops; forestry; and livestock and fisheries. The study sought to generalise all the agricultural activities. The objective of the grouping was to ensure that the sample was as representative as possible. The aim of the question was to establish the category of farming activities, depending on the Republic of Ghana standard.

**Figure 4.15: Main farming activity (Responses from the accountants and preparers of financial statements)**
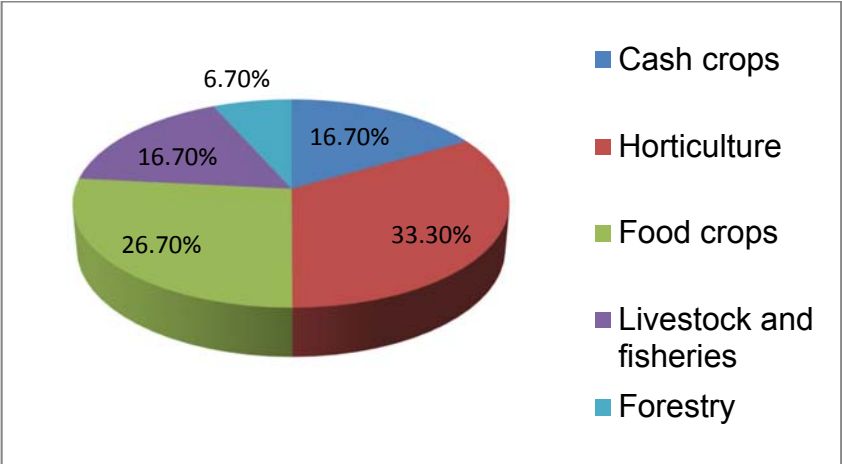


**Source: Field data, 2016**

Figure 4.15 shows that out of the 30 respondents consisting of regulatory bodies, 10% strongly disagreed that preparers of financial statements in SMEs in the agricultural sector in Ghana have excellent knowledge of IFRS, 40% disagreed, 20% were undecided, 20% agreed while 10% strongly agreed.

**Figure 4.16: Section B, Question B3:** *Which of the following is the target market of the business?* The aim of the question was to establish the target market which has the effect on fair value implementation.

**Figure 4.16: Target market (Responses from the accountants and preparers of financial statements)**
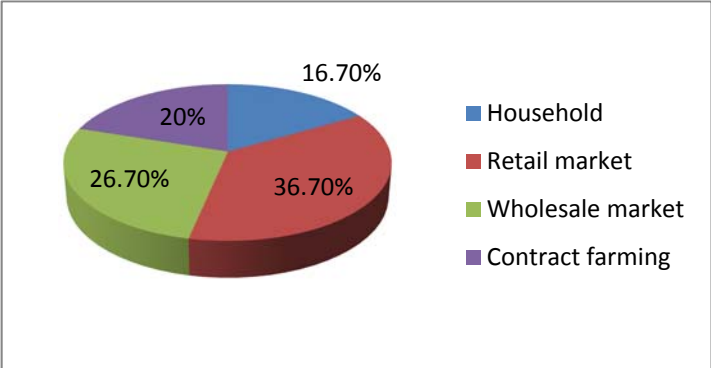


**Source: Field data, 2016**

Figure 4.16 establishes that out of the 90 respondents who are accountants and preparers of financial statements, 16.7% indicated the target market as household, 36.7% mentioned retail market, 26.7% indicated wholesale market while 20% mentioned contract farming as their target market. Therefore, the majority of the respondents have targeted the retail market.

**Figure 4.17: Section B, Question B4:** *Which of the following farming methods pertain to the business?* The aim of the question was to establish the extent to which farmers rely on natural climatic patterns and the level of mechanisation.

**Figure 4.17: Farming methods (Responses from the accountants and preparers of financial statements)**



**Source: Field data, 2016**

Figure 4.17 shows that 26.7% of the respondents indicated the traditional farming method, 33.3% mentioned rain-fed as farming method, 26.7% indicated irrigation while 13.3% mentioned technology as the farming method. Therefore, the majority of the respondents of SMEs in the agricultural sector in Ghana depend on the rain-fed method for farming.

Responses to Q*uestion B4* from regulatory bodies indicated that the major challenges facing them to ensure the enforcement of IFRS 13 of SMEs in the agricultural sector include lack of funds to ensure the smooth implementation of IFRS 13, inadequate qualified personnel to organise training programmes for preparers of financial statements of SMEs in the agricultural sector, scattered nature of SMEs in the agricultural sector, poor infrastructure development, and lack of government support.

*Figure 4.18: Section B, Question B5: Specify the IFRS 13/ IAS 41 valuation approach applied by the business:* The aim of the question was to establish the valuation approach

**Figure 4.18: IFRS 13/IAS 41 valuation approach**
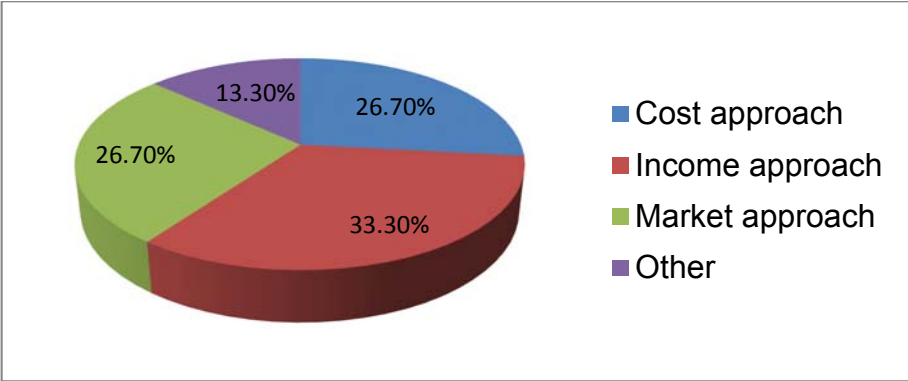


**Source: Field data, 2016**

Figure 4.18 clearly shows that 26.7% of the respondents use cost approach, 33.3% use income approach, 26.7% use market approach, while 13.3% use other forms of approaches.

Responses to Q*uestion B4* from regulatory bodies indicated that challenges related to the implementing IFRS 13 in the agricultural sector can be overcome by infrastructure development since most of these SMEs are in the rural areas. The respondents also indicated that financial assistance from government will help the implementation of IFRS 13. They also called for regular training for staff of regulatory bodies and the inculcation of IFRS 13 in academic curricula to ensure the smooth implementation of IFRS.

**Figure 4.19: Section B, Question B6:** *Indicate the most significant basis of accounting for agricultural produce of the business:* The aim of the question was to ascertain the most popular basis of preparing financial reports.

**Figure 4.19: Basis of accounting for agricultural produce (Responses from the accountants and preparers of financial statements)**
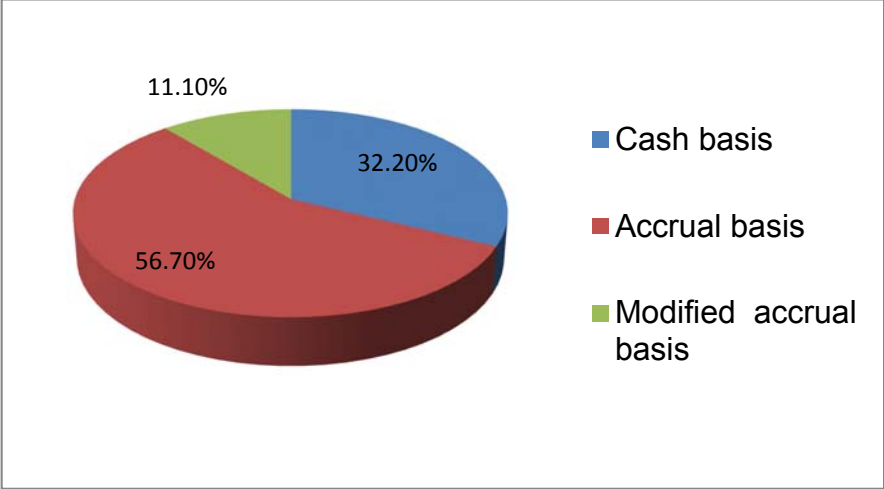


**Source: Field data, 2016**

As indicated by Figure 4.19, 32.2% of the respondents use cash basis of accounting for agricultural produce, 56.7% of the respondents use accrual basis, while 11.1% use modified accrual basis. Therefore, the majority of the respondents (56.7%) use accrual basis of accounting for agricultural produce.

**Figure 4.20: Section B, Question B7:** *Indicate the method the business uses to value / measure biological assets:* The aim of the question was to ascertain the most popular method used to measure biological assets.

**Figure 4.20: Methods used to value biological assets (Responses from the accountants and preparers of financial statements)**
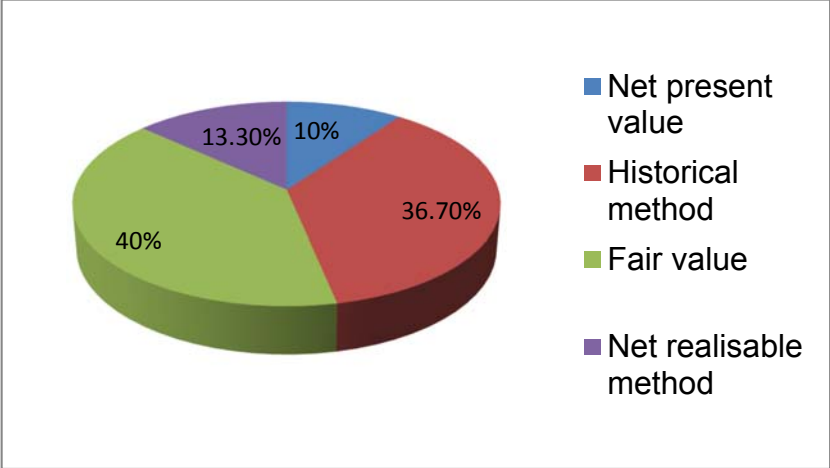
Figure 4.20 indicates that 10% of the respondents use net present value method to measure biological assets, 36.7% use historical method, 40% use fair value method, while 13.3% use net realisable method.

## 4.5 Objectives in preparing financial statements

The aim of this section (section C) of the questionnaire was to know the purpose of preparing published financial statements by the agricultural entities as the basis for information sharing between the financiers and management of the entity.

**Table 4.1: Section C, Question C1**: *Importance of components of financial statements:* The aim of the question was to seek the importance of financial statements prepared by the entity. The respondents were asked to rank the importance in the form of: 5 – Extremely important, 4 – Very important, 3 – Of moderate importance, 2 – Of little importance, 1 – Not important.

**Table 4.1**: **Importance of components of financial statements**

|  | N | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|---|
| Statement of comprehensive Income | 90 | 4.00 | 5.00 | 4.0444 | .20723 |
| Statement of financial position | 90 | 1.00 | 2.00 | 4.0444 | .20723 |
| Statement of cash flows | 90 | 3.00 | 5.00 | 3.8889 | .46069 |
| Statement of changes in equity | 90 | 1.00 | 5.00 | 3.4333 | 1.12230 |
| Notes and explanations to the financial statements | 90 | 2.00 | 5.00 | 3.7222 | .99468 |
| Valid N (listwise) | 90 |  |  |  |  |

**Source: SPSS results**

With reference to Table 4.1 above, the **not important** is represented by 1, while the **extremely important** is represented by 5. According to the results presented in Table 4.1, ranked first is the statement of comprehensive income and the statement of financial position with both having an average score of 4.0444 and standard deviation of 0.20723. This implies that the two statements are highly ranked with the same mean score and the standard deviation.

Ranked second is the statement of cash flows, with a mean score of 3.8889 and a standard deviation of 0.46069 while ranked third is the notes and explanations to the financial statements with an average score of 3.7222 and a standard deviation of 0.99468.

Ranked in the fourth position is statement of changes in equity, with a mean score of 3.4333 and a standard deviation of 1.12230.

**Section C, Question C2**: *Reasons for preparing financial statements*:  The aim of the question was to establish the main reasons why farmers prepare financial statements. The respondents were asked to rank the importance in the form of: 5 – Extremely important, 4 – Very important, 3 – Of moderate importance, 2 – Of little importance, 1 – Not important.

**Table 4.2:** Reasons for preparing financial statements

|  | N | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|---|
| Loan requirement | 90 | 1.00 | 5.00 | 3.2000 | 1.11375 |
| Shareholders | 90 | 3.00 | 5.00 | 4.1333 | .42927 |
| Tax compliance | 90 | 1.00 | 5.00 | 3.5000 | 1.26536 |
| Decision making | 90 | 3.00 | 5.00 | 4.0333 | .54977 |
| Compliance with accounting standards | 90 | 1.00 | 5.00 | 3.4333 | 1.18084 |
| Valid N (listwise) | 90 |  |  |  |  |

**Source: SPSS results**

With reference to Table 4.2 above, the *not important* is represented by 1, while the *extremely important* is represented by 5. According to the results presented in table 4.2, ranked first is the loan requirement, with an average score of 3.2000 and standard deviation of 1.11375.

Ranked second is compliance with accounting standards with a mean score of 3.4333 and a standard deviation of 1.18084; while ranked third is the tax compliance, with an average score of 3.5000 and a standard deviation of 1.26536.

Ranked in the fourth position is decision making with a mean score of 4.0333 and a standard deviation of 0.54977; while ranked fifth is shareholders' satisfaction, with a mean score of 4.1333 and a standard deviation of 0.42927.4.6 Fair value implementation challenges

The aim of this part of the questionnaire administered to both the preparers of financial statements for entities in the agricultural sector and the regulatory bodies was to identify fair value implementation challenges facing SMEs in the agricultural sector of Ghana. This will assist both parties to strategise the smooth implementation of IFRS 13, Fair Value Measurement in the agricultural sector.

## 4.6.1 Knowledge of IFRS

The aim of this section (Section D) was to establish from both the preparers of financial statements for entities in the agricultural sector and the regulatory bodies, whether or not they are knowledgeable in IFRS.

## 4.6.2 Analysis of responses from accountants and preparers of financial statements

**Figure 4.21: Section D, Question D1 (1.1):** *Preparers of financial statements in SMEs in the agricultural sector of Ghana have excellent knowledge of IFRS 13.* This question aimed at establishing whether or not preparers of financial statements for entities in the agricultural sector are knowledgeable in IFRS 13.

**Figure 4.21: Preparers of financial statements**
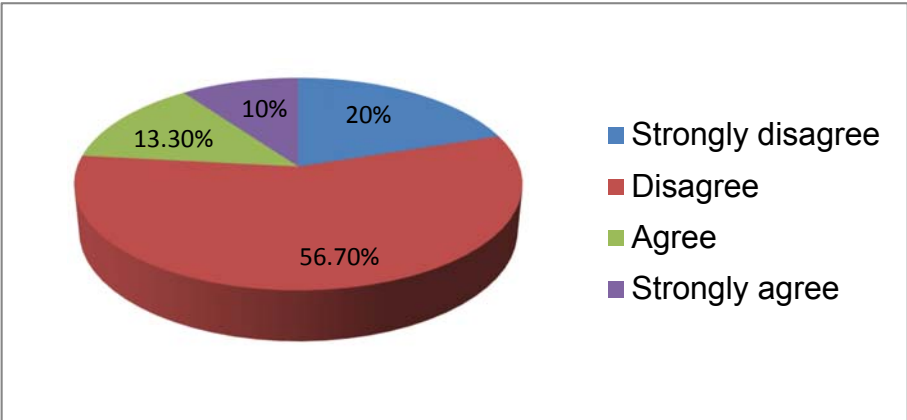


Source: Field data, 2016

According to Figure 4.21, 20% of the respondents strongly disagreed that preparers of financial statements in SMEs in the agricultural sector of Ghana have excellent knowledge of IFRS, 56.7% disagreed with the above view, 13.3% agreed, while 10% strongly agreed with the above statement.

**Figure 4.22: Section D, Question D1 (1.2):** *IFRS 13 is complex and, thus, too difficult to enforce at the SMEs' level in the agricultural sector.* The aim of this question was to determine whether or not IFRS 13 is complex and too difficult to enforce in the agricultural sector.

**Figure 4.22: IFRS 13 is complex and too difficult to enforce**
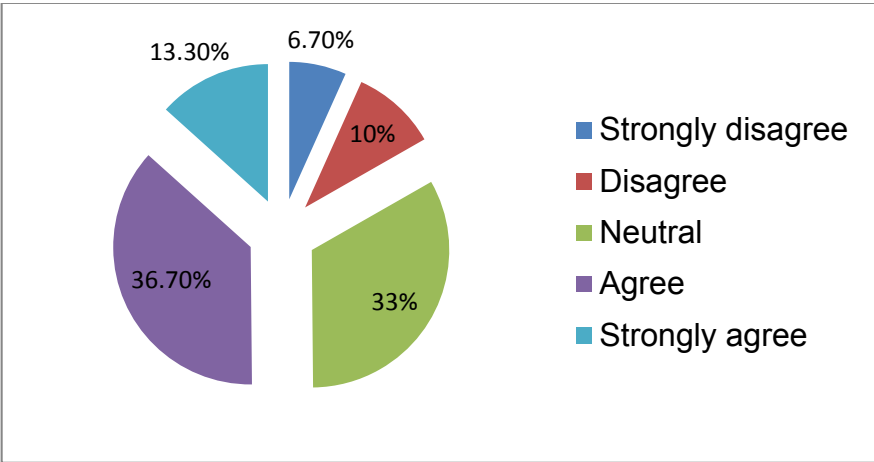


Source: Field data, 2016

According to Figure 4.22, out of the 90 respondents being accountants and preparers of financial statements sampled for the study, 6.7% strongly disagreed that IFRS 13 is complex and, thus, too difficult to enforce at the SMEs level in the agricultural sector, 10% disagreed with the view above, 33% remained neutral, 36.7% agreed, whilst 13.3% strongly agreed.

**Figure 4.23: Section D, Question D1 (1.3):** *Fair value implementation challenges have resulted in a significantly better quality of financial reporting in Ghana.* The aim of this question was to determine whether the implementation challenges of fair value have necessitated quality financial reporting.

**Figure 4.23: Fair value implementation challenges have resulted in a significantly better quality of financial reporting in Ghana**



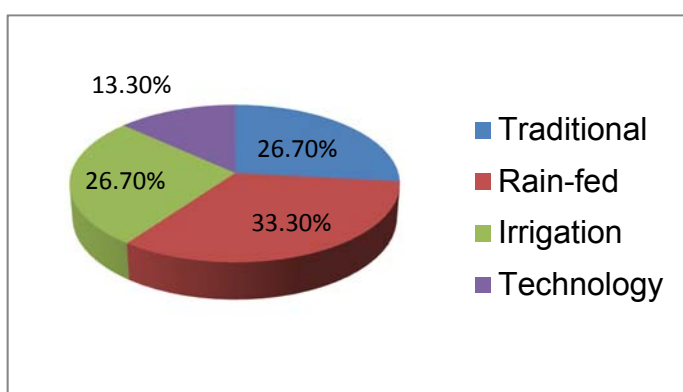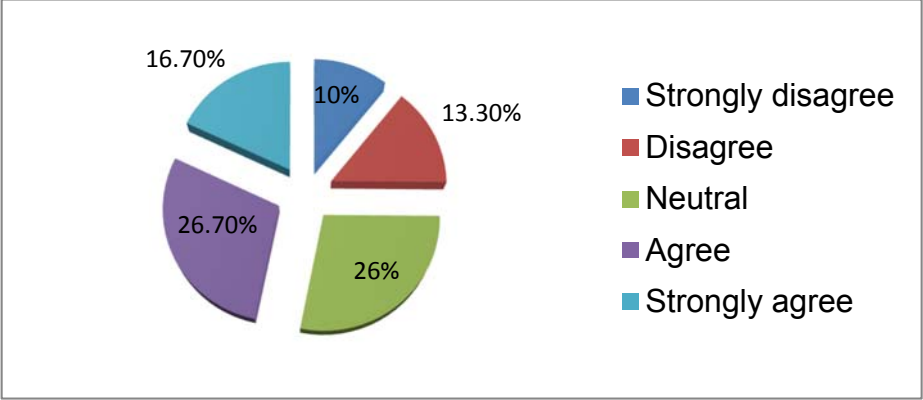**Source: Field data, 2016**

Figure 4.23 indicates that, out of the 90 respondents being accountants and preparers of financial statements, 10% strongly disagreed that fair value implementation challenges have resulted in a significantly better quality of financial reporting in Ghana, 13.3% disagreed, 26% remained neutral, 26.7% agreed, while 16.7% strongly agreed.

## 4.6.3 Analysis of responses from regulatory bodies

**Figure 4.24: Preparers of financial statements**
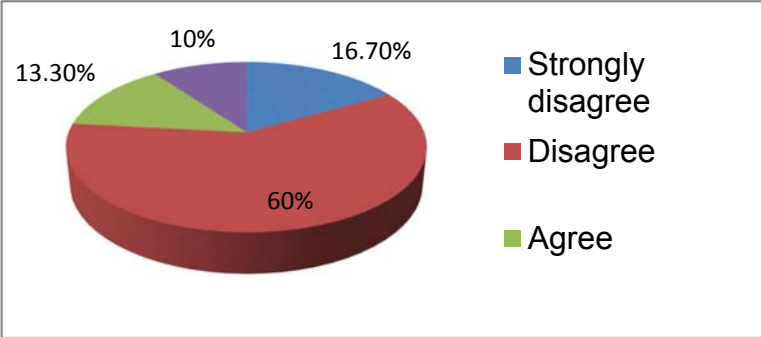


**Source: Field data, 2016**

As established by figure 4.24, 16.7% of the respondents strongly disagreed that preparers of financial statements in SMEs in the agricultural sector of Ghana have excellent knowledge of IFRS, 60% disagreed, 13.3% agreed, while 10% strongly agreed.

**Figure 4.25: IFRS 13 is complex and too difficult to enforce**
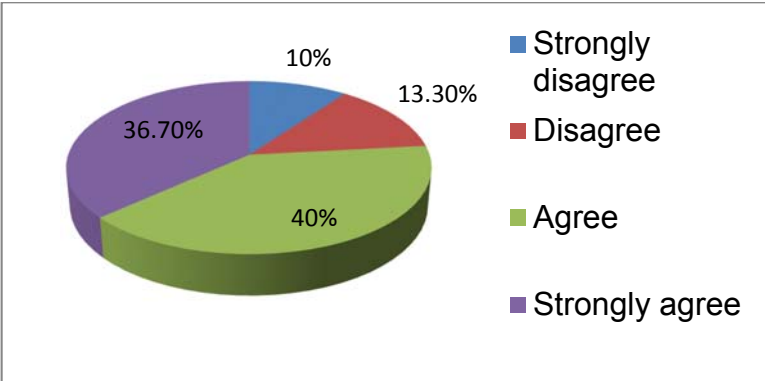


**Source: Field data, 2016**

Figure 4.25 shows that, out of the 30 respondents from regulatory bodies sampled for the study, 10% strongly disagreed that IFRS 13 is complex and thus too difficult to enforce at the SMEs level in the agricultural sector, 13.3% disagreed, 40% agreed, while 36.7% strongly agreed.

**Figure 4.26: Fair value implementation challenges have resulted in significantly better quality of financial reporting in Ghana**
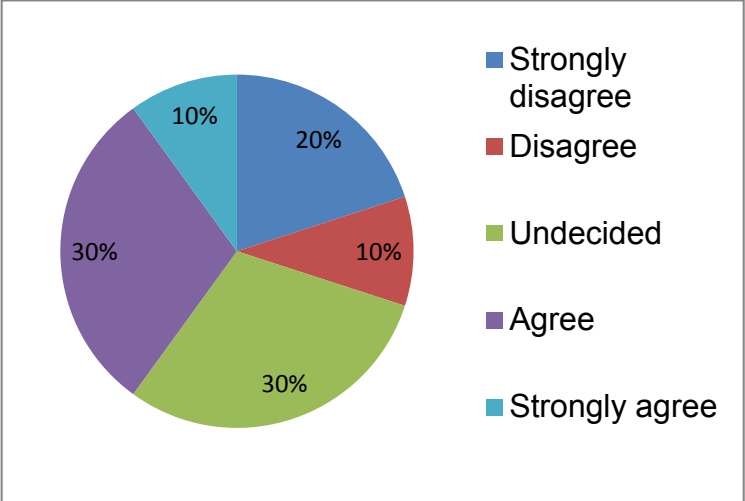


**Source: Field data, 2016**

Figure 4.26 shows that, out of the 30 respondents from regulatory bodies, 20% strongly disagreed that fair value implementation challenges have resulted in significantly better quality of financial reporting in Ghana, 10% disagreed, 30% were undecided, 30% agreed, while 10% strongly agreed.

### 4.6.4 Comparative responses (accountants and regulatory bodies)

The aim of this section was to identify the differences and similarities in the responses from both the accountants and regulatory bodies in relation to the knowledge of IFRS.

Comparing the responses to the question as to whether *preparers of financial statements in SMEs in the agricultural sector of Ghana have excellent knowledge of IFRS 13,* the responses from the accountants clearly indicate that preparers of financial statements in SMEs in the agricultural sector of Ghana do not have excellent knowledge of IFRS as 76.7% in totality disagreed. Moreover, the responses from the regulatory bodies show that 76.7% on a whole agreed that preparers of financial statements in SMEs of the agricultural sector do not have excellent knowledge of IFRS. This means that both groups of respondents were in agreement that preparers of financial statements of SMEs in the agricultural sector do not have knowledge in IFRS.

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Comparing the responses to the question as to whether *IFRS 13 is too complex and difficult to enforce,* 50% of the accountants agreed that IFRS 13 is too complex and, thus, too difficult to enforce in the SMEs in the agricultural sector, while 76.7% of the regulatory bodies side with the same view. This means that the majority of the regulatory bodies believe that IFRS 13 is complex and, thus, too difficult to enforce. James (2011:127) opined that there is the need to educate investors for a very long time before they become abreast with the new standards. Also, Brown and Tarca (2007) concluded that a reduction in financial reporting quality, even when high quality accounting standards are implemented, arises as a result of weak enforcement mechanisms of countries that have adopted IFRS.

Comparing the responses from the two groups of respondents to the question as to whether *fair value implementation challenges have resulted in a significantly better quality of financial reporting in Ghana*, 43.4% of the accountants were in agreement with the statement, while 40% of the regulatory bodies also shared the same view. This clearly indicates that the majority of the accountants agreed that fair value implementation challenges have resulted in a significantly better quality of financial reporting. Kothari (2000), Ball (2001), and Benston (2003) opined that high quality financial reporting will boost the confidence of investors in financial reports as the financial reports will show a true and fair view of the state of affairs of the firm. According to these authors, the perception of truthful reporting will add to the value significance of financial accounting information of the companies of that country.

**Figure 4.27**: **Summary of the knowledge of IFRS**
The aim of this section was to establish the knowledge accountants and preparers of financial statements together with regulatory bodies have on IFRS. The results of section D1 (knowledge of IFRS) are summarised in figure 4.27.

**Figure 4.27: Summary of the knowledge of IFRS. (Responses from accountants and preparers of financial statements and regulatory bodies)**
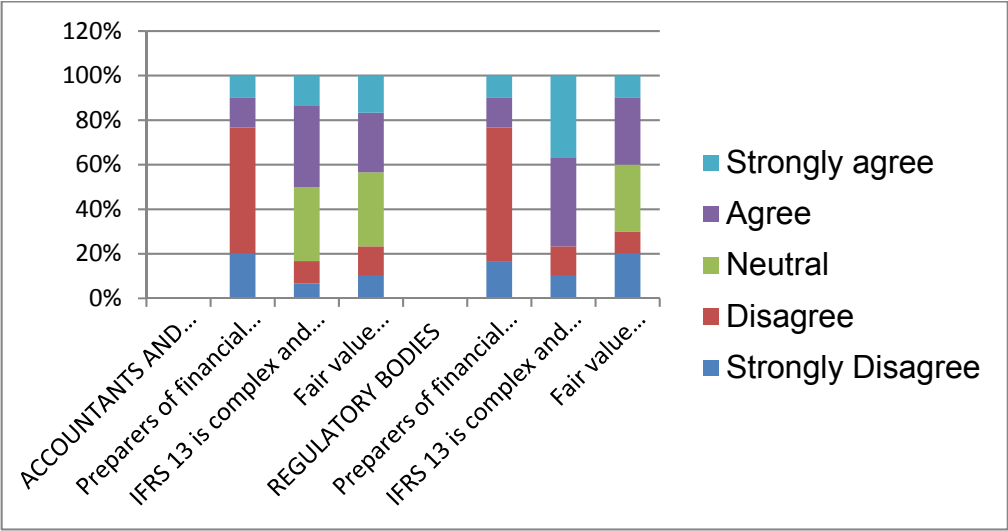


**Source: Field data, 2016**

According to Figure 4.27, out of the total 120 respondents consisting of accountants and preparers of financial statements as well as regulatory bodies, 56.7% indicated that IFRS 13 is complex and, thus, too difficult to enforce in the agricultural sector in Ghana; 57 respondents, representing 47.5%, disagreed that preparers of financial statements in SMEs in the agricultural sector in Ghana have excellent knowledge of IFRS, and 51 respondents, giving an overall agreement rate of 42.5%, indicated that fair value implementation challenges have resulted in significantly better quality of financial reporting in Ghana.

## 4.7 Level of accounting education and training in Ghana

The aim of this section (Section D) was to establish from both the preparers of financial statements for agricultural entities and the regulatory bodies how the level of accounting education and training in Ghana affect the implementation of IFRS 13.

## 4.7.1 Analysis of responses from accountants and preparers of financial statements

The aim of this section was to analyse the responses from the accountants and preparers of financial statements in relation to how the level of accounting education and training in Ghana affect the implementation of IFRS 13.

**Figure 4.28: Section D, Question D1 (1.4):** *There is a shortage of educational institutions.* Some authorities are of the view that the failure to implement IFRS is as a result of a shortage of educational institutions. Therefore, the aim of this question was to ascertain the truth in relation to Ghana.

**Figure 4.28: There is shortage of educational institutions**
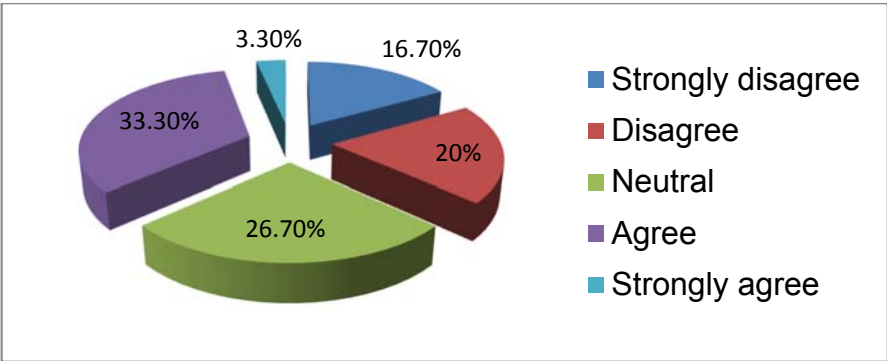


**Source: Field data, 2016**

Figure 4.28 indicates that, out of the 90 respondents from the accountants and preparers of financial statements, 16.7% strongly disagreed that there is a shortage of educational institutions, 20% disagreed, 26.7% were neutral, 33.3% agreed, while 3.3% strongly agreed.

**Figure 4.29: Section D, Question D1 (1.5):** *There is limited access to training materials, seminars and workshops for working professionals.* The aim of this question was to establish whether the lack of training materials, seminars and workshops have resulted in failure to implement IFRS.

**Figure 4.29: Limited access to training materials, seminars and workshops**
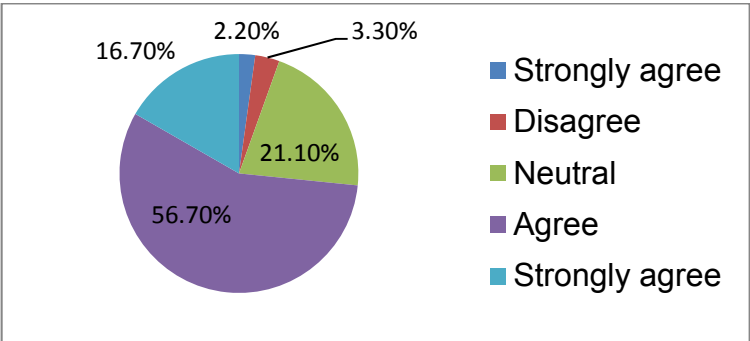
**Source: Field data, 2016**

Figure 4.29 clearly indicates, that out of the 90 respondents from the accountants and preparers of financial statements, 2.2% strongly disagreed that there is limited access to training materials, seminars and workshops for working professionals, 3.3% disagreed, 21.1% were neutral, 56.7% agreed, while 16.7% strongly agreed.

**Figure 4.30: Section D, Question D2 (2.3):** *There is low level of public awareness by regulators and other stakeholders of IFRS.* The objective of this question was to ascertain whether there is a low level of public awareness of IFRS which may have resulted in the failure of implementing IFRS.

**Figure 4.30: Low level of public awareness**
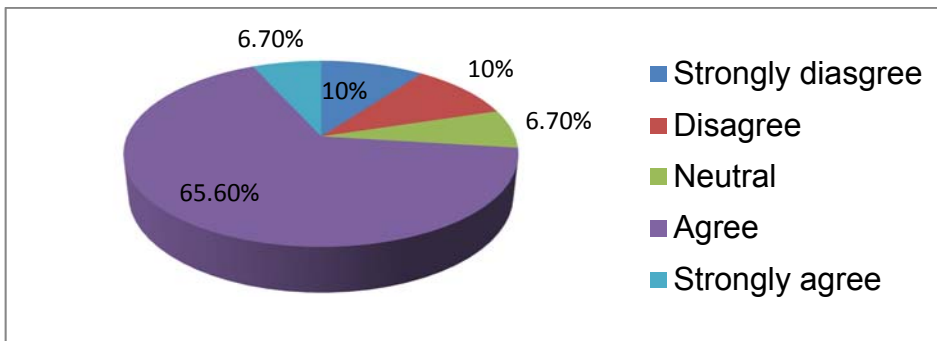


**Source: Field data, 2016**

Figure 4.30 establishes that, out of the 90 respondents from the accountants and preparers of financial statements, 10% strongly disagreed that there is a low level of public awareness by regulators and other stakeholders of IFRS, 10% disagreed, 6.7% were neutral, 65.6% agreed, while 6.7% strongly agreed.

**Figure 4.31: Section D, Question D2 (2.4):** *Academic education does not focus on IFRS.* IFRS may not be included in the academic curricula as suggested by some authorities. However, this question aimed to establish whether academic education in Ghana does not focus on IFRS.

**Figure 4.31: Education does not focus on IFRS**
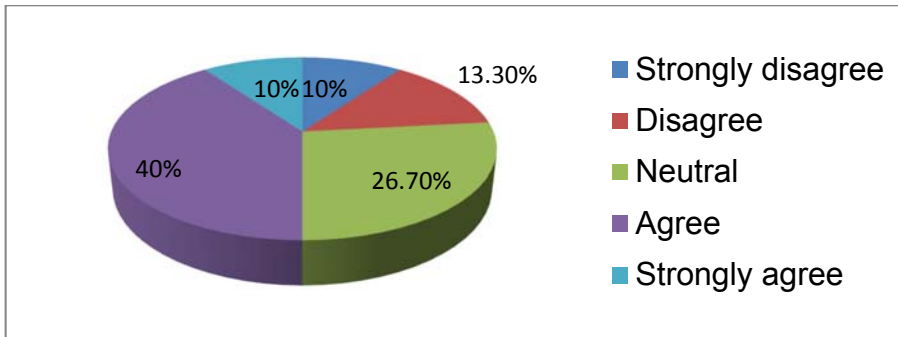


Source: Field data, 2016

With regard to Figure 4.31, out of the 90 respondents from regulatory bodies, 10% strongly disagreed that academic education does not focus on IFRS, 13.3% disagreed, 26.7% remained neutral, 40% agreed, while 10% strongly agreed.

**Figure 4.32: Section D, Question D2 (2.5):** *Academic education does not focus on agricultural accounting.* This question was intended to establish whether the academic curriculum in Ghana has in it agricultural accounting.

**Figure 4.32: Education does not focus on agricultural accounting**
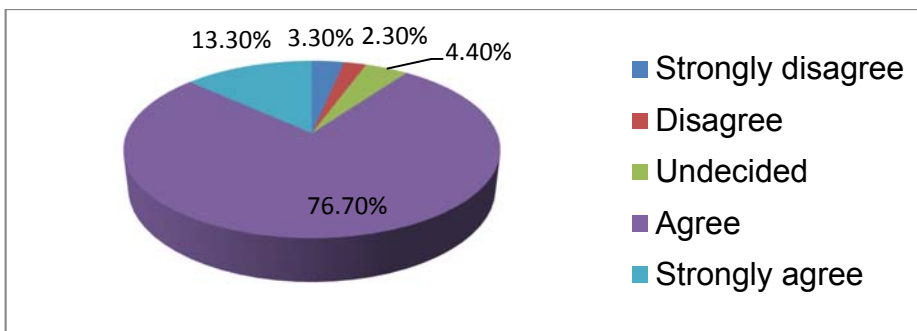


Source: Field data, 2016

Figure 4.32 depicts that, out of the 90 respondents from the accountants and preparers of financial statements, 3.3% strongly disagreed that academic education does not focus on agricultural accounting, 2.3% disagreed, 4.4% were undecided, 76.7% agreed, while 13.3% strongly agreed.

**Figure 4.33: Section D, Question D2 (2.6):** *There is insufficient training and education for accounting personnel toward the implementation of IFRS 13.* This

question aimed to establish whether the accounting personnel are sufficiently trained toward the implementation of IFRS 13.

**Figure 4.33: Insufficient training and education for accounting personnel**
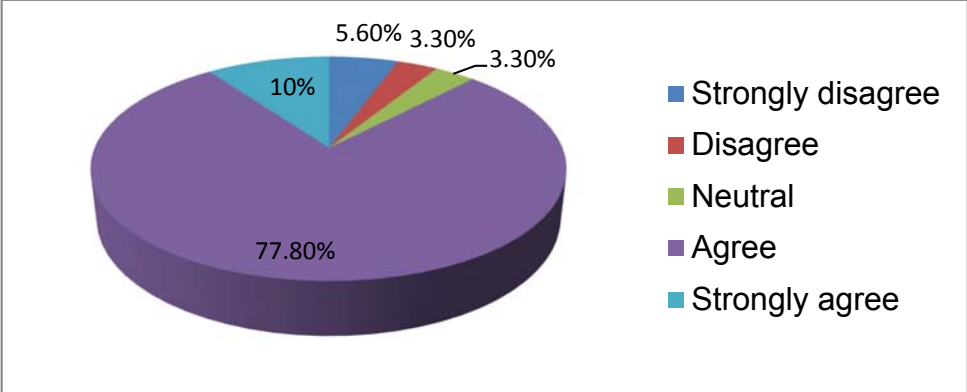


**Source: Field data 2016**

Figure 4.33 indicates that 5.6% of the respondents strongly disagreed that there is insufficient training and education for accounting personnel toward the implementation of IFRS 13, 3.3% disagreed, 3.3% were neutral, 77.8% agreed, while 10% strongly agreed.

Therefore, the respondents believe that there is insufficient training and education for accounting personnel on implementing IFRS. This affirms the assertion made by James (2011). James (2011) indicated some significant and applicable problems when IFRS are implemented, particularly in developing countries where accounting infrastructure is poor. The study revealed that the cost of training staff is very high. This encourages the continuous growth of the entity. Usually, appropriate training is not given to the staff when IFRS is implemented.

### 4.7.2 Analysis of responses from regulatory bodies

The aim of this section (D2) was to analyse the responses from the regulatory bodies in relation to how the level of accounting education and training in Ghana affects the implementation of IFRS 13.

**Figure 4.34: There is a shortage of educational institutions**
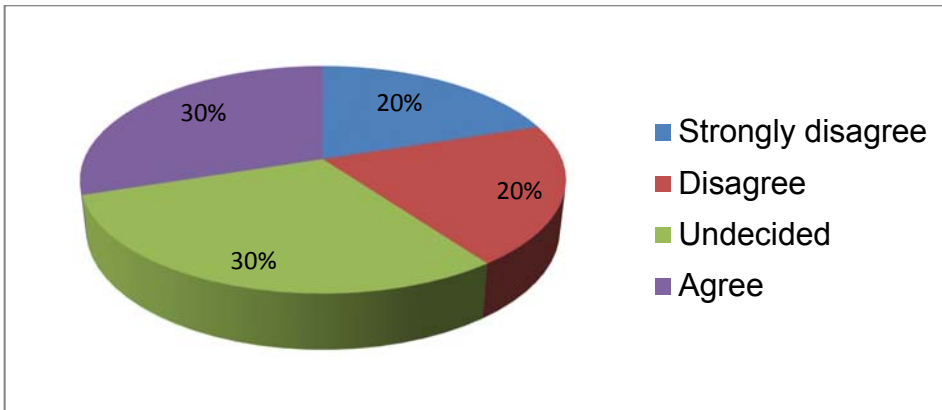


**Source: Field data, 2016**

Figure 4.34 above indicates that 20% of the respondents strongly disagreed that there is a shortage of educational institutions, 20% disagreed, 30% were undecided, while 30% agreed.

**Figure 4.35: Limited access to training materials, seminars and workshops**
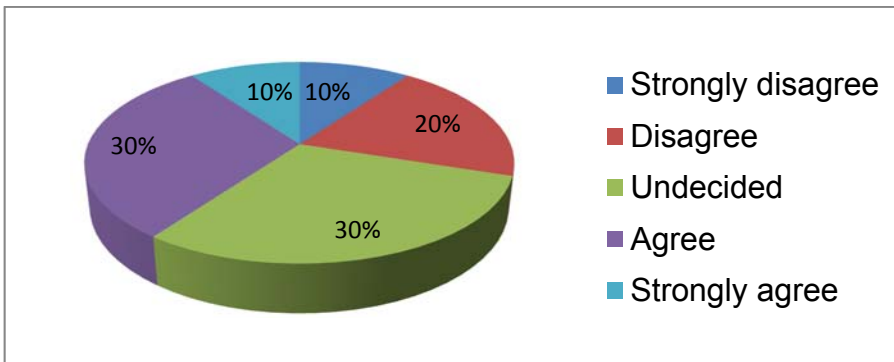


**Source: Field data, 2016**

According to Figure 4.35, out of the 30 respondents from regulatory bodies, 10% strongly disagreed that there is limited access to training materials, seminars and workshops for working professionals, 20% disagreed, 30% were undecided, 30% agreed, while 10% strongly agreed.

**Figure 4.36: Low level of public awareness**
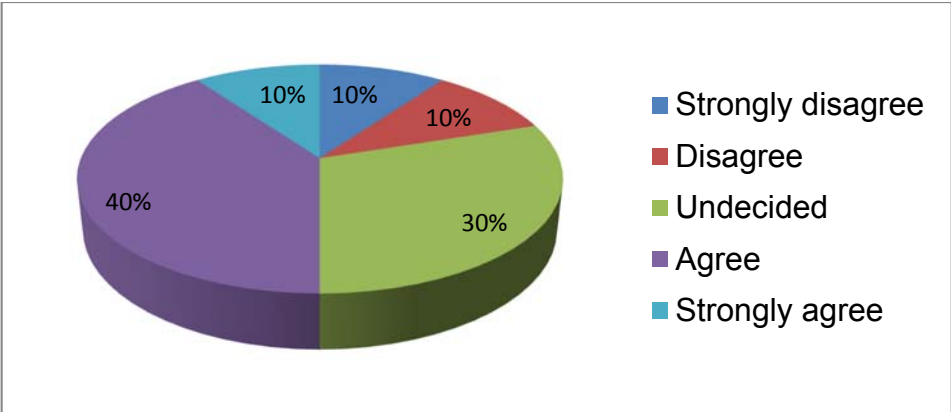


**Source: Field data, 2016**

According to Figure 4.36, out of the 30 respondents from regulatory bodies, 10% strongly disagreed that there is low level of public awareness by regulators and other stakeholders of IFRS, 10% disagreed, 30% were undecided, 40% agreed, while 10% strongly agreed.

**Figure 4.37: Education does not focus on IFRS**
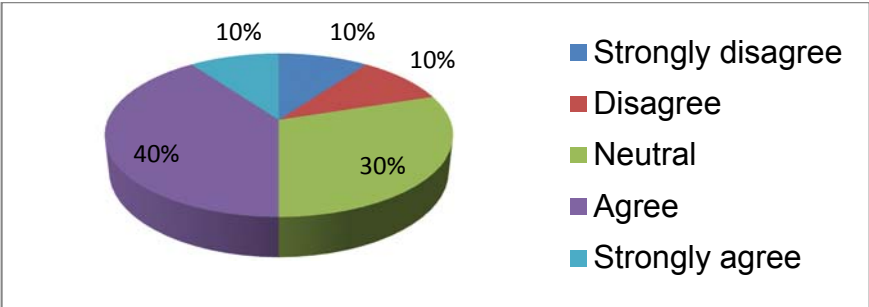


**Source: Field data, 2016**

Figure 4.37 establishes that, out of the 30 respondents from regulatory bodies, 10% strongly disagreed that academic education does not focus on IFRS, 10% disagreed, 30% were undecided, 40% agreed, while 10% strongly agreed.

**Figure 4.38: Education does not focus on agricultural accounting**
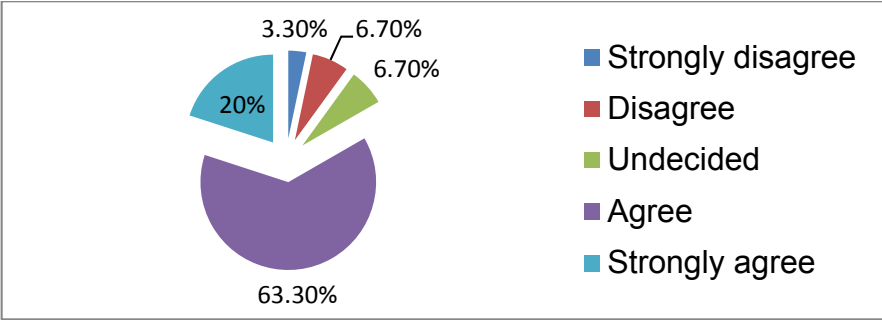
Figure 4.38 depicts that, out of the 30 respondents from the regulatory bodies, 3.3% strongly disagreed that academic education does not focus on agricultural accounting, 6.7% disagreed, 6.7% were undecided, 63.3% agreed, while 20% strongly agreed.

**Figure 4.39: Insufficient training and education for accounting personnel**
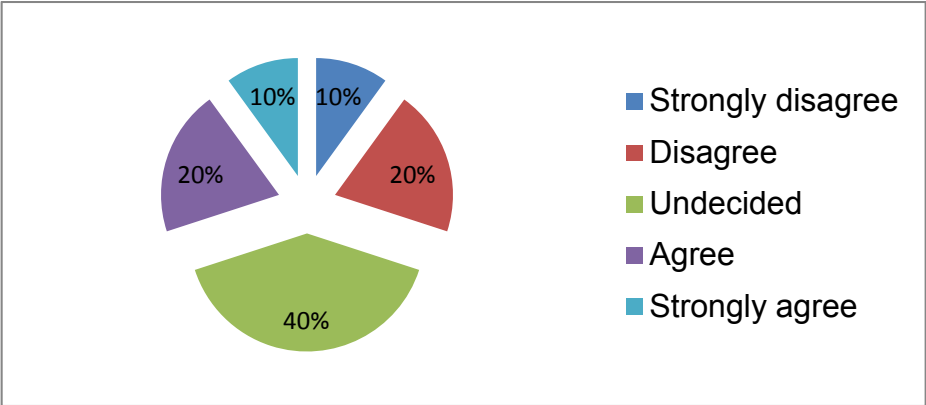
Figure 4.39 depicts that out of the 30 respondents from the regulatory bodies, 10% strongly disagreed that there is insufficient training and education for accounting personnel toward the implementation of IFRS 13, 20% disagreed, 40% were undecided, 20% agreed, while 10% strongly agreed.

### 4.7.3 Comparative responses (accountants and regulatory bodies)

The aim of this section was to identify the differences and similarities of responses from both the accountants and the regulatory bodies in relation to how the level of accounting education and training affect the implementation of IFRS 13.

In response to the question whether there is shortage of educational institutions, 36.7% of the accountants strongly disagreed with the statement while 40% of the regulatory bodies disagreed. This means that both of the groups of respondents were in disagreement that there is shortage of educational institutions in Ghana. United Nations Conference on Trade and Development (UNCTAD, 2008:92-120) made a similar assertion that inadequate educational and training facilities of accountants complicate IFRS implementation.

In response to the question whether there is limited access to training materials, seminars and workshops for working professionals, 73.4% of the accountants agreed and 40% of the regulatory bodies also attested to the fact that there is limited access to training materials, seminars and workshops for working professionals. This finding affirms the outcome of the survey conducted by the United Nations Conference on Trade and Development (UNCTAD, 2008:92-120) which indicated that the high cost of materials, seminars and workshops for qualified accountants makes the implementation of IFRS complex.

In response to the question whether there is a low level of public awareness by regulators and other stakeholders of IFRS, 72.3% of the accountants and preparers of financial statements were in agreement whilst 50% of the regulatory bodies also affirmed that there is a low level of public awareness by regulators and other stakeholders of IFRS in Ghana. This finding confirms the assertion made by the World Bank. The Institute of Chartered Accountants, Ghana (ICAG) has made an effort to raise awareness on the need to apply IFRS, but has done less to build accountants and auditors capacity (World Bank, 2010).

In response to the question whether academic education in Ghana does not focus on IFRS, 50% of the accountants and preparers of financial statements were in agreement whilst 50% of the regulatory bodies agreed that academic education in Ghana does not focus on IFRS. The survey conducted by UNCTAD (2008:92-120)

also affirms that there is a lack of synchronisation of developments between conventional university training, and training through professional programmes.

In response to the question whether academic education in Ghana does not focus on agricultural accounting, 90% of the accountants and preparers of financial statements were in agreement and 83.3% of the regulatory bodies also affirmed that academic education in Ghana does not focus on agricultural accounting.

In response to the question whether there is insufficient training and education for accounting personnel toward the implementation of IFRS 13, 87.8% of the accountants and preparers of financial statements were in agreement and 30% of the regulatory bodies also affirmed that there is insufficient training and education for accounting personnel toward the implementation of IFRS 13. Meanwhile, 40% of the regulatory bodies remained undecided whilst 3.3% of the accountants also remained neutral. ICAG (2010) made an assertion that typically, there is inadequate time to train individuals to gain knowledge to apply the international standards during adoption.

**Figure 4.40**: **Summary of the level of accounting education and training in Ghana**.
The aim of this section was to establish the level of accounting education and training relating to fair value implementation challenges facing SMEs in the agricultural sector in Ghana. The results of section B2 (level of accounting education and training in Ghana) are summarised in figure 4.39

**Figure 4.40 Summary of the Level of accounting education and training in Ghana. (Responses from accountants and preparers of financial statements as well as regulatory bodies)**
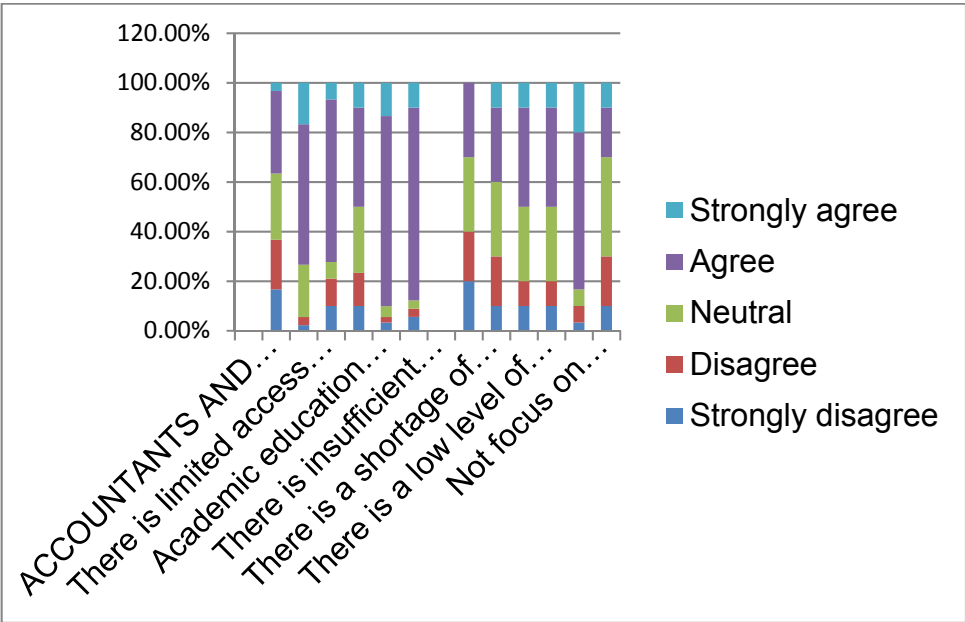


**Source: Field data, 2016**

According to Figure 4.40, out of the total 120 respondents, consisting of accountants and preparers of financial statements as well as regulatory bodies, 78 respondents representing 65% were in agreement that there is a limited access to training materials, seminars and workshops for working professionals; 80 respondents representing 66.7% were in agreement that there is a low level of public awareness by regulators and other stakeholders of IFRS; 60 respondents, representing 50% were in agreement that academic education does not focus on IFRS, 96 respondents representing 80% were in agreement that academic education in Ghana does not focus on agricultural accounting and 88 respondents, representing 73.3%, were in agreement that there is insufficient training and education for accounting personnel toward the implementation of IFRS 13.

**4.8 Economic challenges in respect of fair value implementation facing SMEs in the agricultural sector of Ghana**

The aim of this section (Section D3) was to establish from the preparers of financial statements for agricultural entities, the economic challenges in respect of fair value implementation facing SMEs in the agricultural sector in Ghana.

**4.8.1 Ranking of the challenges in respect of economic challenges relating to fair value implementation facing SMEs in the agricultural sector in Ghana**

Table 4.3 Section D3 Rank the following factors in the order you consider them to constitute a challenge in respect of economic challenges relating to fair value implementation facing SMEs in the agricultural sector in Ghana: 1 for the highest challenge to 5 for the lowest challenge.

The aim of this section was to establish the order in which respondents would rank the different factors relating to the economic challenges in respect of fair value implementation facing SMEs in the agricultural sector of Ghana. The respondents were asked to state the extent to which they agreed with the statements in a Likert scale with; 5 – Strongly agree; 4 – Agree; 3 – Neutral; 2 – Disagree; 1 – Strongly disagree. In order to analyse the results, it was necessary to enter the questions and then to compute the statistical values, using the Statistical Package for the Social Sciences (SPSS). The results of the statistical analysis are represented in Table 4.3 below with the questions as follows:

**Table 4.3: Economic challenges in respect of fair value implementation facing SMEs in the agricultural sector in Ghana(Responses from accountants and preparers of financial statements)**

| | N | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|---|
| Market does not exist and is not readily determinable | 90 | 1.00 | 5.00 | 3.3000 | 1.30212 |
| It is not possible to market agricultural produce | 90 | 1.00 | 5.00 | 2.3000 | 1.19409 |
| Market is accessible only through middle traders | 90 | 1.00 | 5.00 | 3.4333 | 1.26358 |
| Lack of market information on prices of biological asset | 90 | 1.00 | 5.00 | 3.8667 | 1.05148 |
| There is no guaranteed market prices for farmers | 90 | 1.00 | 5.00 | 3.6333 | 1.20346 |
| High inflation erodes the benefits of exchange rate | 90 | 1.00 | 5.00 | 3.7333 | 1.29649 |
| Frustration of Ghanaian culture | 90 | 1.00 | 5.00 | 3.2333 | 1.34122 |
| The pricing discovery process is not transparent | 90 | 1.00 | 5.00 | 3.6000 | 1.17846 |
| The pricing discovery process is not understandable | 90 | 1.00 | 5.00 | 3.5222 | 1.15367 |
| A market does not exist for the harvested produce | 90 | 1.00 | 5.00 | 2.7000 | 1.10616 |
| A market does not exist for bearer biological assets | 90 | 1.00 | 5.00 | 2.7889 | 1.31964 |
| Valid N (listwise) | 90 | | | | |

**Source: SPSS results**

With reference to Table 4.3 above, the highest challenge is represented by 5 while the least challenge is represented by 1. According to the results presented in Table 4.3, ranked first is the fact that it is not possible to market agricultural produce and it is considered to be the most economically challenging, with an average score of 2.3000 and a standard deviation of 1.30212. Therefore, out of the total 90 respondents of accountants and preparers of financial statements, the majority of the respondents were in disagreement that it is not possible to market the agricultural produce before further processing in Ghana.

Ranked second is the fact that a market does not exist for the harvested produce with a mean score of 2.7000 and a standard deviation of 0.10616; while ranked third is the fact that a market does not exist for bearer biological assets, with an average score of 2.7889 and a standard deviation of 1.31964. Ranked in the fourth position is the frustration of Ghanaian culture, with a mean score of 3.2333 and a standard deviation of 1.34122.

Ranked in the fifth position is the fact that a market does not exist and is not readily determinable, with an average mean of 3.3000 and a standard deviation of 1.30212; whilst ranked sixth is the fact that the market is accessible only through middle traders with an average mean of 3.4333 and a standard deviation of 1.26358

Ranked seventh is the fact that the pricing discovery process is not understandable with a mean score of 3.5222 and a standard deviation of 1.15367. Ranked eight is the fact that the pricing discovery process is not transparent, with a mean score of 3.6000 and a standard deviation of 1.17846; while ranked ninth is the fact that there is no guaranteed market price for farmers, with an average score of 3.6333 and a standard deviation of 1.20346.

Ranked tenth is the fact that the high inflation erodes benefits of exchange rate with a mean score of 3.7333 and a standard deviation of 1.29649; while ranked eleventh is

the fact that there is a lack of market information on prices of biological assets, with an average score of 3.8667 and a standard deviation of 1.05148.

## 4.9 Existing laws on the implementation of IFRS 13/IAS 41 in the agricultural sector of Ghana

The aim of this section (Section B3) was to establish from the regulatory bodies how the existing laws affect the implementation of IFRS 13/IAS 41 in the agricultural sector of Ghana.

**Figure 4.41: Section B, Question B3 (3.1):** *IFRS implementation costs are high.* Some authorities opined that IFRS implementation costs are high. Thus the aim of this question was to establish whether the cost involved in the implementation of IFRS is really high.

**Figure 4.41: IFRS implementation costs are high (Responses from the regulatory bodies)**
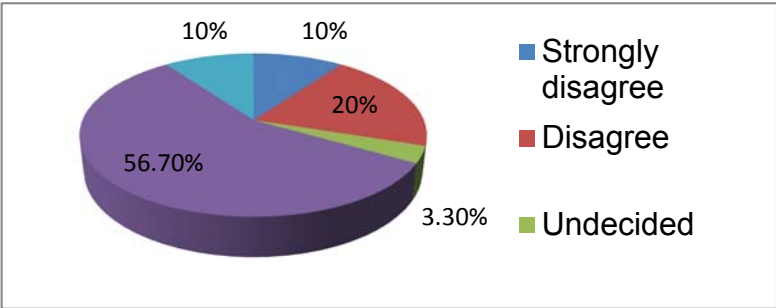


**Source: Field data, 2016**

Figure 4.41 shows that 10% of the respondents strongly disagreed that IFRS implementation costs are high, 20% disagreed with the above view, 3.3% were undecided in their opinion, 56.7% agreed, while 10% strongly agreed with the bodies, 20 respondents, representing 66.7.4% were in agreement that IFRS implementation costs are high. However, Smith (2009) commented on IFRS transition cost that it may differ from company to company and some may be common to all companies across the globe (Smith, 2009). According to the report "EU implementation of IFRS and the Fair Value Directive" (ICAEW, 2007), among the ten common conversion costs of IFRS are training

of staff; additional costs of external audit; additional costs of external data and additional staff training (such as IT staff, internal audit and management). The outcome of the survey conducted by UNCTAD (2008:92-120) indicated that high cost including an increase in staffing cost above view makes implementation of IFRS difficult.

**Figure 4.42: IFRS enforcement costs are high (Responses from the regulatory bodies)**
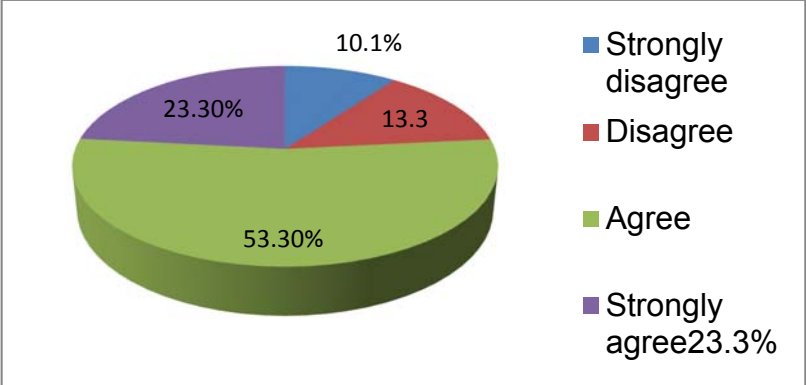


**Source: Field data, 2016**

Figure 4.42 depicts that 10.1% of the respondents strongly disagreed that IFRS enforcement costs are high, 13.3% disagreed with the above view, 53.3% agreed, while 23.3% strongly agreed with the above view.

Thus, out of the total 30 respondents from regulatory bodies, 23 respondents, representing 76.7% were in agreement that IFRS enforcement costs are high. Ridley (2011) indicated that poor adoption of IFRS would certainly bring about additional challenges. In the countries where IFRS is being adopted, accounting professional bodies must be responsible in the process of enforcement. However, this study has revealed that IFRS enforcement cost is high in Ghana.

**Table 4.43: Section B, Question B3 (3.3):** *Lack of adequately trained human resources makes the enforcement difficult.* The aim of this question was to determine whether the inadequately trained human resources make enforcement of IFRS in Ghana difficult.

**Figure 4.43: Lack of adequately trained human resources makes enforcement difficult (Responses from the regulatory bodies)**
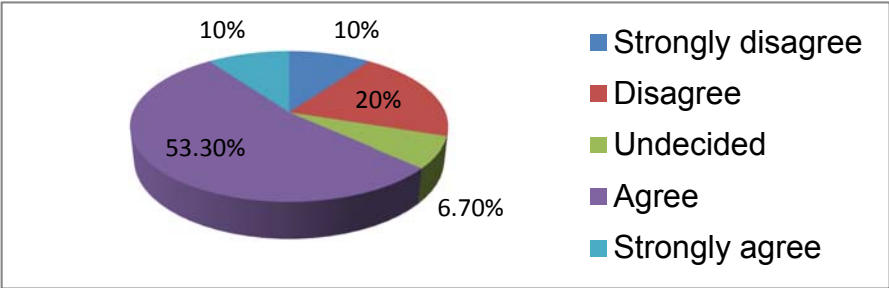


**Source: Field data, 2016**

Figure 4.43 shows that 10% of the respondents strongly disagreed that lack of adequately trained human resources makes enforcement difficult, 20% disagreed with the above view, 6.7% were undecided in their opinion, 53.3% agreed, whilst 10% strongly agreed.

Therefore, out of the total of 30 respondents from regulatory bodies, 18, representing 63.3% were in agreement that lack of adequately trained human resources makes enforcement difficult. This finding affirms a study conducted by Ali and Ustundag (2009) in Turkey. The study revealed several challenges in the IFRS implementation such as potential knowledge shortfalls in application and enforcement difficulties. Also, a survey conducted by the United Nations Conference on Trade and Development (UNCTAD, 2007) revealed that there is lack of guaranteed trained persons who understand the use of IFRS.

**Figure 4.44: Section B, Question B3 (3.4):** *Constant professional development is not well monitored.* The reason for this question was to establish the perception of regulatory bodies whether constant professional development is not well monitored.

**Figure 4.44: Constant professional development is not well monitored** (Responses from the regulatory bodies)
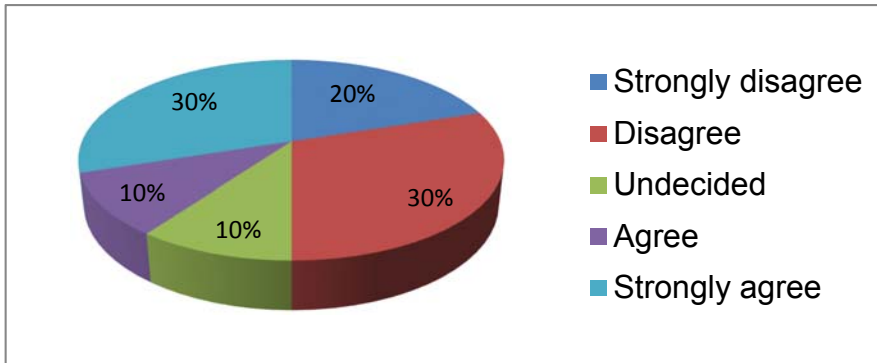
**Source: Field data, 2016**

Figure 4.44 shows that 20% of the respondents strongly disagreed that constant professional development is not well monitored, 30% disagreed with the above view, 10% were undecided in their opinion, 10% agreed, while 30% strongly agreed with the above statement.

Therefore, out of the total of 30 respondents from regulatory bodies, 15, representing 50% were in disagreement that constant professional development is not well monitored. This implies that regulatory bodies do monitor professional development constantly. Nevertheless, there has been a similar assertion that there is a lack of continued professional development of professional accountants (UNCTAD, 2008:92-120).

**Figure 4.45: Section B, Question B3 (3.5):** *Absence of involvement of regulatory bodies makes enforcement difficult.* The aim of this question was to ascertain whether failure on the part of IFRS setting body to involve regulatory bodies in Ghana makes enforcement difficult.

**Figure 4.45: Absence of involvement of regulatory bodies makes enforcement difficult (Responses from the regulatory bodies)**
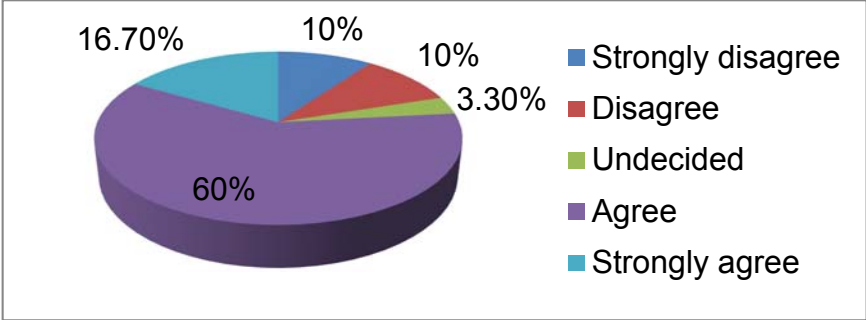


**Source: Field data, 2016**

According to Figure 4.45, 10% of the respondents strongly disagreed that the absence of the involvement of regulatory bodies makes enforcement difficult, 10% of the respondents disagreed, 3.3% were undecided, 60% agreed, while 16.7% strongly agreed.

Therefore, out of 30 respondents from regulatory bodies, 23 respondents, representing 76.7%, were in agreement that absence of involvement of regulatory bodies makes enforcement difficult. This finding affirms the assertion made by the study conducted by (UNCTAD, 2008:92-120) which revealed that the lack of representation in the standard-setting process makes enforcement of IFRS difficult.

**Figure 4.46: Section B, Question B3 (3.8):** *There is a lack of methodological relationship between existing local laws and IFRS.* The lack of a methodological relationship between existing local laws and IFRS may result in IFRS implementation and enforcement challenges. This question aimed to establish the fact from the regulatory bodies.

**Figure 4.46: There is a lack of a methodological relationship between existing local laws and IFRS (Responses from the regulatory bodies)**
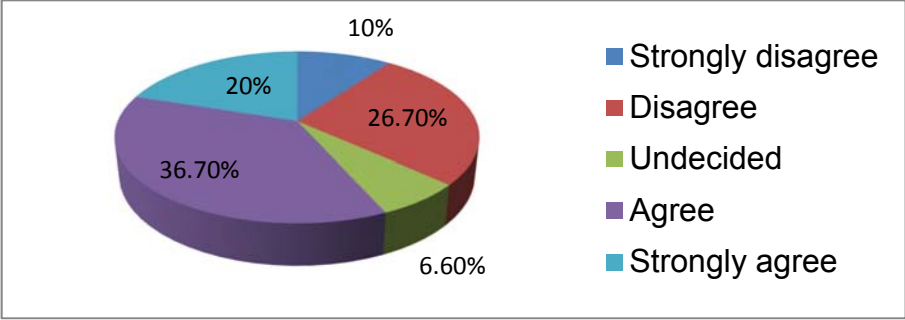


**Source: Field data, 2016**

Figure 4.46 establishes that 10% of the respondents strongly disagreed that there is a lack of methodological relationship between existing local laws and IFRS, 26.7% of the respondents disagreed, 6.6% were undecided, 36.7% agreed whilst 20% strongly agreed.

Therefore, out of 30 respondents from regulatory bodies, 17 respondents, representing 56.7% were in agreement that there is a lack of a methodological relationship between existing local laws and IFRS. Notably, UNCTAD (2008:92-120) made a similar assertion that there is inconsistency between existing IFRS and laws at the level of entity and country.

**Figure 4.47: Section B, Question B3 (3.9):** *There is a lack of a methodological relationship between regulatory systems of the country (i.e. between government and other regulatory structures). The question aimed at establishing whether there is a correlation between the regulatory systems of Ghana and other regulatory structures.*

**Figure 4.47: There is a lack of a methodological relationship between regulatory systems of the country and other regulatory structures (Responses from the regulatory bodies)**
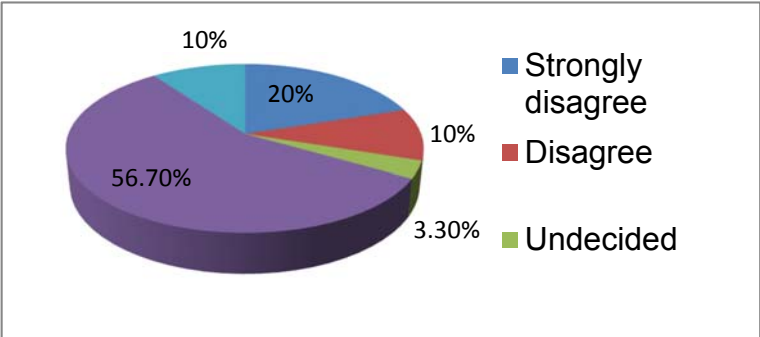


**Source: Field data 2016**

Figure 4.47 depicts that 20% of the respondents strongly disagreed that there is a lack of a methodological relationship between regulatory systems of the country (i.e. between government and other regulatory structures), 10% disagreed, 3.3% were undecided, 56.7% agreed, while 10% strongly agreed.

Therefore, out of 30 respondents from regulatory bodies, 20 respondents, representing 66.7% were in agreement that there is a lack of a methodological relationship between regulatory systems of the country (i.e. between government and other regulatory structures). UNCTAD (2008:92-120) made the same assertion that there is lack of coherence in the regulatory system, which makes enforcement of IFRS difficult.

**Figure 4.48 Section D, Question D3 (3.6):** *High inflation that erodes benefits of exchange rate gains from exports.* This question sought to establish whether high inflation erodes benefits of exchange rate gains from exported agricultural produce*.*

**Figure 4.48: High inflation that erodes benefits of exchange rate (Responses from the regulatory bodies)**
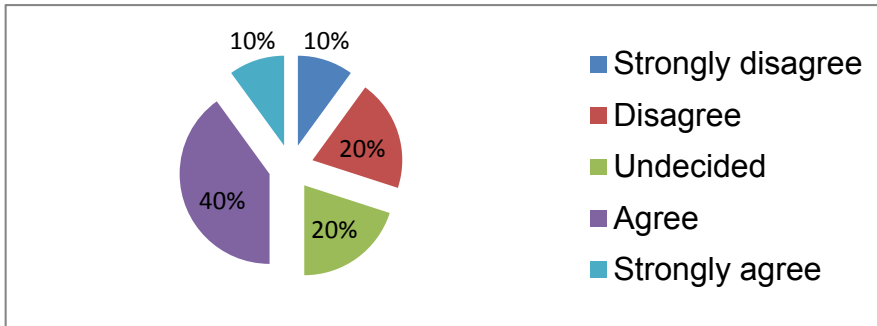
Figure 4.48 indicates that 10% of the respondents strongly disagreed that high inflation that erodes the benefits of exchange rate gains from exports, 20% disagreed, 20% were undecided, 40% agreed, while 10% strongly agreed.

Therefore, out of 30 respondents from regulatory bodies, 15 respondents, representing 50% were in agreement that high inflation erodes the benefits of exchange rate gains from exports.

**Figure 4.49: Section D, Question D3 (3.7)**: *Frustration with the Ghanaian culture of not doing things according to schedule results in economic losses.* This question sought to establish whether the attitude of delay in seasonal cultivation or farming results in economic losses of agricultural produce.

**Figure 4.49: Frustration of Ghanaian culture (Responses from the regulatory bodies)**
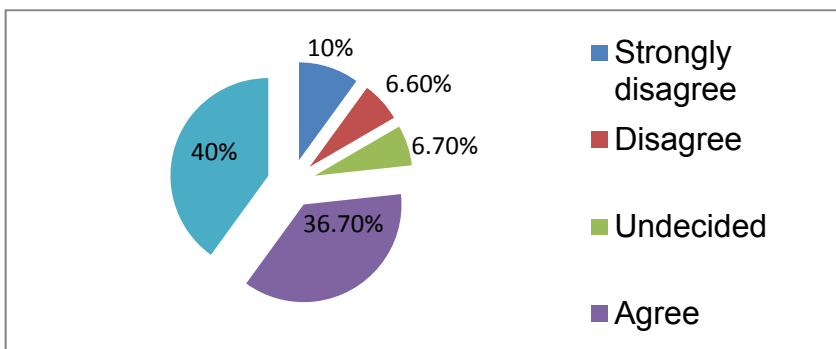
Figure 4.49 shows that 10% of the respondents strongly disagreed that frustration with the Ghanaian culture of not doing things according to schedule, results in

economic losses, 6.6% of the respondents disagreed, 6.7% were undecided, 36.7% agreed, while 40% strongly agreed.

Thus, out of 30 respondents from regulatory bodies, 23 respondents, representing 76.7% were in agreement that frustration with the Ghanaian culture of not doing things according to schedule results in economic losses.

**Figure 4.50:** Summary of the effect of existing laws on the implementation of IFRS 13/IAS 41 in the agricultural sector in Ghana

The aim of this section was to establish the effect of existing laws on the implementation of IFRS 13/IAS 41 in the agricultural sector in Ghana.  The results of section B4 are summarised in figure 4.50

**Figure 4.50 Summary of the effect of existing laws on the implementation of IFRS 13/IAS 41 in the agricultural sector in Ghana (Responses from regulatory bodies)**
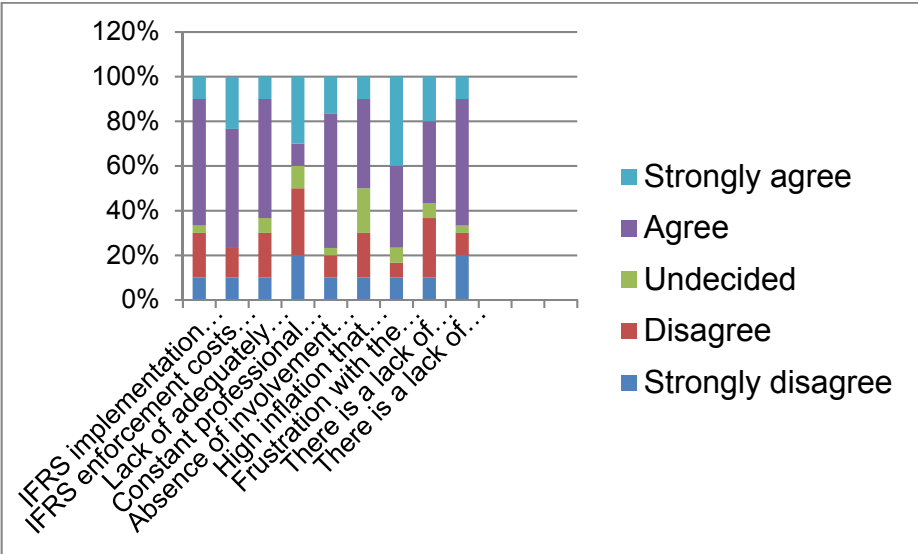


**Source: Field data, 2016**

According to Figure 4.50, frustration with the Ghanaian culture of not doing things according to schedule; high inflation that erodes the benefits of exchange rate gains from exports; lack of methodological relationship between regulatory systems of the

country; lack of methodological relationship between existing local laws and IFRS; absence of involvement of regulatory bodies; lack of adequately trained human resources; high IFRS enforcement costs, and high IFRS implementation costs are considered to be the most important effects of existing laws on the implementation of IFRS 13/IAS 41 in the agricultural sector of Ghana.

## 4.10 Summary and conclusion

Chapter 4 analysed two sets of questionnaires. The first set consisted of 90 questionnaires administered to accountants and preparers of financial statements in the SMEs in the agricultural sector of Ghana, whilst the second set was made up of 30 questionnaires administered to regulatory bodies of financial reporting in Ghana. The results of each segment were analysed individually. There was a high response rate, which may be as a result of the personal administration of the questionnaire and the snowball sampling technique adopted. The responses to the questions in section A of the questionnaire to the accountants and preparers of financial statements affirmed that the majority of SMEs in the agricultural sector are privately controlled. It was also revealed that most SMEs in the agricultural sector have implemented IFRS. It was again observed from the responses to the questions in section B of the questionnaire that most farmers target retail markets. The results also indicated that the majority of SMEs in the agricultural sector of Ghana depend on the rain-fed method for farming. In section C, it was ranked first that SMEs prepare financial statements for loan requirements. The results also indicated that the statement of financial position was considered the most important component of financial statements as it was ranked in the first position. It was also indicated in section D that IFRS 13 is complex and, thus, too difficult to enforce in the agricultural sector of Ghana. Again, the results indicated that preparers of financial statements in SME's in the agricultural sector of Ghana do not have excellent knowledge of IFRS. It was again discovered that there is a low level of public awareness by regulators and other stakeholders of IFRS whilst the academic education in Ghana does not focus on agricultural accounting. The analysis clearly indicated that the majority of the respondents opined that there is a lack of market information on the prices of

biological assets and accessibility of principal markets is also through middle traders and brokers.

However, the responses to the questions in section A4 of the questionnaire to the regulatory bodies indicated that the objective of their office in promoting fair value measurement will ensure uniformity of financial reporting, to meet the international standardisation of financial reporting and to abide by the national regulations. The responses to the question A5 in section A of the questionnaire to the regulatory bodies showed that about 60% of the respondents initiated plans for the implementation of IFRS 13 Fair Value Measurement in 2008, 30% mentioned 2010, whilst 10% of the respondents mentioned 2015. The analysis also depicted that the offices of the regulatory bodies have been organising seminars and training programmes for accountants in all areas but not specifically those working in the agricultural entities. It was again ascertained from the regulatory bodies that preparers of financial statements in SMEs in the agricultural sector in Ghana do not have excellent knowledge of IFRS 13 because IFRS 13 is complex and, thus, too difficult to enforce at the SMEs level in the agricultural sector. Responses from the regulatory bodies in Section D of the questionnaire confirmed that the lack of a methodological relationship between existing local laws and IFRS, the absence of involvement of regulatory bodies, lack of adequately trained human resources, high IFRS enforcement costs and high IFRS implementation costs are considered to be the most significant effects of existing laws on the implementation of IFRS 13/IAS 41 in the agricultural sector of Ghana.

Comparatively, both the accountants and the regulatory bodies have the same view that IFRS 13 is complex and, thus, too difficult to enforce in the agricultural sector of Ghana. They also believe that preparers of financial statements in SME's in the agricultural sector of Ghana do not have excellent knowledge of IFRS whilst there is also a low level of public awareness by regulators and other stakeholders of IFRS. They again opined that the academic education in Ghana does not focus on

agricultural accounting while access to training materials, seminars and workshops for working professionals are also limited.

Therefore, Chapter 5 will deal with a summary of the research, the conclusion, recommendations and areas for further research.

# CHAPTER 5
# SUMMARY, CONCLUSION AND RECOMMENDATIONS

## 5.1 Introduction

The objective of the study was to ascertain the fair value implementation challenges facing SMEs in the agricultural sector of Ghana. Chapter 4 dealt with the analysis of data, based on the self-administered questionnaires returned from the respondents. This chapter gives a summary of the study and draws a conclusion, based on the findings. Again, based on the results of the study, recommendations and areas for further research are given in this chapter.

## 5.2 Summary of the research

The objectives and the research problem are restated, followed by a concluding summary per chapter of this study to outline how the chapters dealt with the research objectives. From these concluding paragraphs, the overall research conclusion, recommendations and areas identified for probable further research are set out.

## 5.3 Objectives of the study and the research problem

The main objective of the study was to ascertain the fair value implementation challenges facing SMEs in the agricultural sector of Ghana. Fair value accounting in the agricultural sector of Ghana is a new concept, as the previous Ghana National Accounting Standards (GNAS) did not make provision for the treatment of biological assets. To be able to analyse the fair value implementation challenges in line with Small and Medium-Sized Entities (SMEs) in the agricultural sector, the specific objectives of the study were to:

*(i) Identify the challenges of implementing IAS 41/IFRS 13 in the agricultural sector of Ghana;*

*(ii) Determine how the challenges affect the quality of financial reporting in Ghana;*

*(ii). Identify the level of knowledge of preparers of IFRS / IAS procedures and implementation of the standards in Ghana;*

*(iv) Determine the level of accounting education and training on the practical implementation of IFRS 13/ IAS 41of Ghana;*

*(v) Identify the effect of existing laws on the smooth implementation of IFRS 13/ IAS 41 in Ghana, and;*

*(vi) Determine economic challenges in Ghana relating to fair value implementation in the agricultural sector.*

## 5.4 Literature review

Chapter 2 introduced literature related to this study. The literature was reviewed in line with the stated objectives of this study. The first section defined SMEs and also identified the SMEs' financial statements users and their information requirements. The chapter therefore discussed International Financial Reporting Standards for Small and Medium-Sized Entities (IFRS for SMEs) in the agricultural sector. The chapter also focused on the brief history of IFRS and how the application of IFRS 13 or IAS 41 affects the quality of financial statements. IFRS implementation challenges facing countries in Africa like Kenya, South Africa and Nigeria that have implemented IFRS was also looked at.

Additionally, the chapter centred on the need for fair value implementation and the application of accounting standards. The next subsection reviewed the historical perspective of fair value accounting as well as the meaning and use of the fair value measurement basis for financial reporting. Furthermore, the chapter conceptualised fair value implementation and its challenges facing the agricultural sector in and outside Ghana.

The agricultural sector is an important part of the global economy. However, agricultural accounting and implementation guidelines in this area are still largely lacking. Most countries have defined SMEs by using quantitative criteria such as assets, revenue and number of employees. On the contrary, the IASB has focused on qualitative aspects to define SMEs as entities that publish general purpose financial statements, although they lack public accountability. The literature revealed that the majority of accounting

pronouncements and standards for the accounting of biological assets are off-centred in favour of fair value and historical cost less accumulated depreciation and impairment losses, which is applicable only in situations where it is not possible to obtain reliable estimates of fair value.

More so, the literature revealed the effects, advantages and cost or disadvantages of implementing IFRS. The summary of the effects of implementing IFRS include: improved market liquidity, increased profitability ratios and improvement in accounting quality.

The literature also revealed that proponents of fair value argue that fair value provides more relevant information to the decision makers by reflecting the reality of the market dynamics. It is also argued that fair values are more comparable than cost because they take away the "manager's voice" and give the "market voice". It has also been ascertained that IAS 41 and IFRS 13 increase the financial reporting comparability of firms in the agricultural sector.

Again, the literature demonstrated that the main implementation challenges of fair value are the following: the cost of recognising biological assets at fair value exceeds the gains obtained by this evaluation method, the method of fair value described in IAS 41 increases the unpredictability of earnings, selecting a discount rate for the evaluation of biological assets involves subjective judgment, high cost burden, lack of skilled accounting personnel, ignorance or low knowledge levels about IFRS, and then weak regulation and enforcement procedures. However, IAS 41 remains the consistent first step of a transition to fair value assessment in the agricultural sector. In Ghana, the agricultural sector remains the backbone of the economy, traditionally occupying an important place in the national economic structure.

Nevertheless, IAS 41 is not directly reflected in Ghanaian regulations. The implementation of fair value for SMEs in the agricultural sector would increase the quality of accounting. In addition, fair value implementation by SMEs would be a challenge for every country, especially for the transition countries such as Ghana. Moreover, the

system of accounting in Ghana has moved towards IFRS in order to gain access into international markets. But as the literature has indicated some challenges faced by some countries in Africa and elsewhere, Chapter 4 of this study identified whether Ghana is facing the same or similar challenges.

## 5.5 Research design

Chapter 3 commenced with a description of the research, scope of the study, whereafter the research design and methods most appropriate to answer the research questions were explained. The chapter concluded with a discussion of the limitations and ethical considerations applicable. The rationale of Chapter 3 was to explain the methods of this study, describe the sample selection, explain the data collection instruments, and explain how data was analysed. This chapter described the research methods and design. The study used both primary and secondary data. Secondary data was collected from various textbooks, articles from different journals, and relevant theses. Primary data was obtained from respondents (accountants and regulatory bodies) who completed the questionnaires.

The empirical part of this study is critical in helping to establish the reality in the field in order to either accept or refute the theoretical findings. For the purpose of this study SMEs were defined as the entities that publish financial statements even though they do not have public accountability. However, in Ghana, most SMEs operate in an informal way, and this creates a challenge in the definitions of both the population and the sample design. It is for this reason that the current study adopted a purposive sampling technique in order to target only those respondents who are likely to provide information relevant to the purpose of this study. The SMEs selected were those engaged in cash crops, horticulture, food crops and livestock, and fisheries. Data was also gathered from the following accounting regulators: ICAG, GSE, SEC, GRA and GAS. However, due to inadequate resources, a sample of 90 accountants and preparers of financial statements from SMEs and 30 from regulatory bodies were used.

## 5.6 Analysis of results

Chapter 4 dealt with the analysis of the two sets of questionnaires administered to the respondents. The results of each question were analysed, as summarised in Appendixes C and D and presented separately. The findings of this study are summarised below:

### 5.6.1 Background information

According to Figure 4.9, the results indicated that the preparers of financial statements in SMEs in the agricultural sector of Ghana are experienced in preparing accounts. Figure 4.10 also revealed that the majority of the respondents have an interest in agricultural accounting.

Responses to Q*uestion A6* from the regulatory bodies indicated that no special training, seminars and workshops are specifically organised for accountants working in SMEs in the agricultural sector of Ghana.

### 5.6.2 Farm profile

Figure 4.14 clearly indicated that the majority of the entities in the agricultural sector of Ghana are private companies. It was again indicated by figure 4.16 that the majority of the respondents had targeted the retail market for their farm produce. It was also depicted by figure 4.17 that SMEs in the agricultural sector of Ghana mainly depend on the rain-fed method for farming. The responses depicted by figure 4.18 indicated that the income approach is used as a valuation approach by most of the agricultural entities in the study. It was also revealed by the accountants and preparers of financial statements that the majority of the respondents (56.7%) use the accrual basis of accounting for agricultural produce whilst biological assets are mainly valued, using the fair value method.

### 5.6.3 Objectives in preparing financial statements

Both the statement of comprehensive income and the statement of financial position were ranked first as the most important components of financial statements whilst ranked second was the statement of cash flows. This finding indicates that both the statement of comprehensive income and the statement of financial position are the

most important components of financial statements. Notes and explanations provide more information regarding the financial statements and therefore play a supporting role to the financial statements. It was also discovered that the loan requirement is the main reason for the preparation of financial statements. This finding is contrary to the assertion that shareholders' satisfaction is the main reason for the preparation of financial statements.

## 5.6.4 Knowledge of IFRS

The analysis of the responses from the accountants and preparers of financial statements indicated that preparers of financial statements in SMEs in the agricultural sector of Ghana do not have excellent knowledge of IFRS. The analysis also indicated that IFRS 13 is complex and, thus, too difficult to enforce in the agricultural sector of Ghana. Again, it was indicated that fair value implementation challenges have resulted in a significantly better quality of financial reporting in Ghana. On the other hand, the regulatory bodies shared a similar opinion with the preparers of financial statements that IFRS 13 is complex; preparers of financial statements in SMEs in the agricultural sector of Ghana do not have excellent knowledge of IFRS; and fair value implementation challenges have resulted in a significantly better quality of financial reporting in Ghana.

## 5.6.5 Level of accounting education and training in Ghana

The analysis of the responses from the accountants and preparers of financial statements of SMEs in the agricultural sector of Ghana indicated that there is limited access to training materials, seminars and workshops for working professionals. The analysis depicted that there is a low level of public awareness by regulators and other stakeholders of IFRS. It was also discovered that academic education does not focus on IFRS. Moreover, the results showed that academic education in Ghana does not focus on agricultural accounting, whilst the respondents also indicated that there is insufficient training and education for accounting personnel toward the implementation of IFRS 13.

Notably, the analysis of the responses from the regulatory bodies resulted in the same assertions made by the accountants and preparers of financial statements to affirm that there is limited access to training materials, seminars and workshops; a low level of public awareness on IFRS; academic education does not focus on IFRS and agricultural accounting; whilst there is insufficient training and education for accounting personnel toward the implementation of IFRS 13. Responses from regulatory bodies, with regard to Question B4, revealed that lack of funds to ensure smooth implementation of IFRS 13; inadequate qualified personnel to organise training programmes for preparers of financial statements of SMEs in the agricultural sector; the scattered nature of SMEs in the agricultural sector; poor infrastructure development and lack of government support make the implementation of IFRS 13 difficult.

## 5.6.6 Economic challenges in respect of fair value implementation facing SMEs in the agricultural sector of Ghana

The analysis of the responses from the accountants and preparers of financial statements clearly indicated that lack of market information on the prices of biological assets, accessibility of principal market through middle traders and brokers, nonexistence of a principal market for agricultural produce, and frustration of the Ghanaian attitude of not doing things according to schedule are considered to be the most significant economic challenges with regard to fair value implementation difficulties facing SMEs in the agricultural sector of Ghana.

## 5.6.7 Existing laws on the implementation of IFRS 13/IAS 41 in the agricultural sector of Ghana

The analysis of the responses from regulatory bodies under this objective clearly depicted that high inflation erodes benefits of exchange rate gains from exports, lack of a methodological relationship between regulatory systems of the country, lack of a methodological relationship between existing local laws and IFRS, the absence of the involvement of regulatory bodies, lack of adequately trained human resources, high IFRS enforcement costs, and high IFRS implementation costs are considered to be

the most significant effects of existing laws on the implementation of IFRS 13/IAS 41 in the agricultural sector of Ghana.

The analysis of the responses from the accountants and preparers of financial statements clearly confirmed that the lack of adequately trained human resources, high IFRS enforcement costs, and high IFRS implementation costs make the implementation of IFRS 13 Fair Value Measurement difficult.

## 5.7 Conclusion

The objective of this study was to ascertain the fair value implementation challenges facing SMEs in the agricultural sector of Ghana. The study reviewed literature on fair value implementation challenges of selected African countries. The study revealed that the most preferred method of valuing biological assets is fair value. The study indicated that there is no commodity market in Ghana. This has called for the sale of agricultural produce through the marketing intermediaries or the middle traders. These middle traders may not give accurate information to the farmers. As ascertained in this study, the commodity price unpredictability makes it suitable to provide market information as a basis for making an estimate for the fair valuation of biological assets. Fair value provides vital information for users to take rational decisions.

It was established that IFRS 13 is complex, and thus, too difficult to enforce at the SMEs level in the agricultural sector of Ghana. As a result of this, regulatory bodies might provide summary information on the application of IFRS 13 in the agricultural sector of Ghana. It was also indicated clearly that fair value implementation challenges have resulted in a significantly better quality of financial reporting in Ghana. This implies that high quality financial reporting will boost the confidence of investors in financial reports as the financial reports will show a true and fair view of the state of affairs of the firm.

It was clearly established from the respondents that academic education does not focus on IFRS. This confirms that there is lack of synchronisation of developments

between conventional university training, and training through professional programmes. It was again indicated by the respondents that there is insufficient training and education for accounting personnel for implementing IFRS in the agricultural sector of Ghana. Thus, management of agricultural entities and the regulatory bodies have to organise training programmes for preparers of financial statements in order to ensure an efficient implementation of IFRS 13.

Another challenge discovered was that it is not possible to market agricultural produce as a market does not exist for the harvested produce in Ghana. This is an indication that there is no commodity market for the marketing of agricultural produce. It therefore calls for the immediate establishment of a commodity market in Ghana in order to speed up the marketing of the farm produce.

Additional challenges established were that IFRS implementation costs and the enforcement costs are high. According to Smith (2009), transition costs may differ from company to company, and some may be common to all companies across the globe. This suggests that accounting professional bodies must be responsible for the process of enforcement. This also implies that management of SMEs in the agricultural sector should recruit and select qualified personnel during the employment process in order to avoid training cost after recruitment.

Lack of a methodological relationship between existing local laws and IFRS was also brought to light as one of the IFRS implementation challenges of Ghana. A similar assertion was made that there is inconsistency between existing IFRS and laws at the level of entity and country. This implies that the financial reporting standards in Ghana are completely different from the IFRS. It was also established that there is lack of a methodological relationship between the regulatory systems of Ghana and other regulatory structures. This means that the accounting standard setting body in Ghana is not involved at the international level where IFRS is set.

## 5.8 Recommendations

### 5.8.1 Organisation of training and seminars

This study recommends that the regulatory bodies of financial reporting in Ghana should organise regular intensive training and seminars for organisations that have implemented IFRS or those in the implementation stage with more emphasis on IFRS 13 for SMEs in the agricultural sector in Ghana. This study clearly shows that there is inadequate training and education for the smooth implementation of IFRS of Ghana. Regular seminars for preparers of financial statements in SMEs in the agricultural sector concerning the application of IFRS 13 will pave the way for the Ghanaian agricultural sector to meet international standards. Training materials should also be made available to the preparers of financial statements in agricultural entities to enable them to update themselves on financial reporting standards.

### 5.8.2 Inclusion of IFRS in the academic curricula

This study also recommends that the inclusion of IFRS, more especially IFRS 13, in the academic curricula of both universities and polytechnics will help to minimise the difficulties of the implementation of such standards. The introduction of agricultural accounting into the academic curricula is a sign of boosting the agricultural sector of Ghana. As it is always said that 'agriculture is the backbone of Ghanaian economy', then "agricultural accounting will be the backbone of financial reporting in the agricultural sector in Ghana".

### 5.8.3 Establishment of commodity market

This study discovered that there is lack of market information on prices of biological assets as well as nonexistence of a principal market for agricultural produce. Therefore, this study recommends the establishment of a commodity market. The establishment of such a commodity market will make market information available to the agricultural entities, which will in turn serve as a market place for agricultural produce. The commodity market will also help to eliminate marketing agricultural produce through middle traders and brokers.

### 5.8.4 Involvement of regulatory bodies in standards setting

This study revealed that there is lack of a methodological relationship between existing local laws and IFRS. Therefore, this study again recommends that local regulatory bodies of financial standards should be involved at the international level in order to ensure the synchronisation of local standards and IFRS.

### 5.8.5 Government subsidies

This study again showed that IFRS implementation and enforcement costs are extremely high. Therefore, the study suggests that the government should subsidise the implementation and enforcement costs of IFRS. The government subsidy will boost the morale of the regulatory bodies in the enforcement of IFRS. The implementation of IFRS 13 in the agricultural sector in Ghana will ensure the harmonisation of financial reports which will in turn help to increase the revenue base of government through taxation. Again, subsidies from government will aid the regulatory bodies to raise the awareness on IFRS among the preparers of financial statements and other stakeholders.

### 5.9 Areas for further research

This study examined fair value implementation challenges facing SMEs in the agricultural sector of Ghana. The study has uncovered some factors that have contributed to these challenges. Therefore, there is the need for the study to call for further research in the following areas:

### 5.9.1 Exploration of the level of accounting education and training on IFRS

This study revealed that there is a low level of accounting education and training on IFRS. Therefore, the findings from this study calls for further studies to explore how far the education and training have reached the public for the adoption of IFRS.

### 5.9.2 The attitude of Ghanaian accountants towards the adoption of IFRS

This study has uncovered that IFRS is complex and too difficult to enforce in the agricultural sector of Ghana. However, further studies are needed to explore the attitude of Ghanaian accountants in general towards the implementation of IFRS.

### 5.9.3 Fair value implementation challenges facing financial institutions in Ghana

This study has discovered a number of factors that contribute to fair value implementation challenges of SMEs in the agricultural sector. Therefore, the study calls for an investigation into fair value implementation challenges facing financial institutions in Ghana.

### 5.9.4 Fair value reporting challenges facing SMEs in the agricultural sector in Ghana

This study explored the fair value implementation challenges facing SMEs in the agricultural sector of Ghana since no prior study has been conducted on fair value reporting challenges facing SMEs in the agricultural sector in Ghana. As SMEs in the agricultural sector might face some challenges on fair value reporting, this study calls for further studies on fair value reporting challenges facing SMEs in the agricultural sector of Ghana.

### 5.9.5 Level of compliance with International Financial Reporting Standards (IFRS): Insights from Ghana

Finally, this study recommends further studies to ascertain the level of compliance as far as international financial reporting standards are concerned. It is believed that further studies on the level of IFRS compliance will assist the regulatory bodies of Ghana to discover the countrywide compliance level which will aid them to take IFRS implementation decisions.

**Bibliography**

AASB (Australian Accounting Standards Board). 1998. Australian Accounting Standards AASB1037 *Self-generating and regenerating assets.* Available from: www.group100.com.au/.../sub_19990525_aasb_1037.htm [Accessed on 6 February 2015]

ACCA (Association of Chartered Certified Accountants). 2000. *The economic environment and the SME* [online]. Available from: http://www.accaglobal.com/pdfs/smallbusiness/EESME.doc [Accessed 20 March 2014]

ACCA (Association of Chartered Certified Accountants). 2004. *Preparing for 2005 - the impact of IFRS on unlisted companies* [online]. Available from: http://www.accaglobal.com/ general/activities/ library/financial_reporting/ifrs_articles/2792523 [Accessed 20 March 2014]

ACCA (Association of Chartered Certified Accountants). 2008. *SMEs should grasp the value of intellectual property* [online]. Available from: http://www.accaglobal.com/databases/pressandpolicy/unitedkingdom/3215605 [Accessed 15 March 2014]

Adams, P. 2004. Resolving conflicts in accounting system - Issues and arguments; Lecture series; London; August 12 – 13

Ahmed, K. & Goodwin, J. 2007. An empirical investigation of earnings restatements by Australian firms. *Accounting and Finance* 47: 1–22

AICPA (American Institute of Certified Public Accountants). 2011. *International Financial Reporting Standards (IFRS)*: An AICPA Backgrounder. Available from: http://www.ifrs.com/updates/aicpa/Backgrounder_pdf.html. [Accessed 5 March 2014]

Ali, A. & Hwang, L. 2000. 'Country-specific factors related to financial reporting and the value relevance of accounting data'. *Journal of Accounting Research*, 38(1), 1-21

Alp, A. & Ustuntag, S. 2009. Financial reporting transformation the experience of Turkey. Critical Perspective on Accounting, *2* 0, 680-699. Available from: http://dx.doi.org/10.1016/j.cpa.2007.12.00 [Accessed 10 March 2014]

Anderson, A. 1993. The globalization GAAP. *Management accounting*, August, 52-54

Argilés, J. M., & Slof, J. 2000. New opportunities for farm accounting. *European Accounting Review*, 10(2): 361-383

Argilés, J. M., Bladon, J. G., & Monllau, T. 2008. *Fair value versus historic cost Valuation for Biological assets* [online]: Implications for the quality of financial information. Available online from:
http://ideas.repec.org/p/bar/bedcje/2009215.html [Accessed 5 March 2014]

Armstrong, C., Barth, M. Jagolinzer, A., & Riedl, E. 2007*. Market reaction to the adoption of IFRS in Europe*. Working paper, Stanford University Available from: http://www.hbs.edu/faculty/Publication%20Files/09-032.pdf [Accessed 5 March 2014]

Armstrong, C. S., Barth, M. E., Jagolinzer, A. D., & Riedl, E. J. 2010. *Market reaction to the adoption of IFRS in Europe* [online]. Accounting Review*, 85*(1), 1-1. Available from:http://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=47187686&site=bsi-live [Accessed 5 March 2014]

Ashbaugh, H., & Pincus M. 2001. Domestic Accounting Standards, International Accounting Standards, and the Predictability of Earnings. *Journal of Accounting Research,* 39, 417-434

AU (African Union). 2005. Progress in the development of African commodity exchanges. 2nd extraordinary session of the conference of ministers of trade. Arusha. Available from: www.africa-union.org/.../Commodities/UNCTAD_Exchanges.pdf

[Accessed 10 March 2014]

Bailey, K. D. 1994. *Methods of social research*. 4th edition. New York: The Free Press. Available from: http://www.amazon.com/Methods-Social-Research-4th-Edition/dp/1416576940 [Accessed 12 March 2015]

Baker, R. G. 1998. The market for information evidence from finance directors, analysts and fund managers. *Accounting and Business Research*, 29(1): 3-20

Ball, R. 2006. 'International Financial Reporting Standards (IFRS): Pros and cons for investors', *Accounting and Business Research*, International Accounting Policy Forum,: 5-27

Ballas A. A., Skoutela, D., & Tzovas, C. A. 2010. The relevance of IFRS to an emerging market: Evidence from Greece. Athens University of Economics & Business, Athens, Greece

Barlev, B., & Haddad, J.R. 2003**.** Fair value accounting and the management of the firm. *Critical Perspectives on Accounting* 14, 383-415

Barth, ME, Landsman, W.R., & Lang, M.H. 2008. 'International Accounting Standards and accounting quality', *Journal of Accounting Research*, 46 (3): 467-498

Barth, M.E., Landsman, W.R., & Wahlen, J.M. 1995. 'Fair value accounting: Effects on banks' earnings volatility, regulatory capital, and value of contractual cash flows', *Journal of Banking & Finance*, 19 (3-4): 577-605

Bartunek, J. M., & Louis, M.R. 1996. Insider/outsider team research. Thousand Oaks, CA: Sage

Benston, G., Bromwich, M., Litan, R. E., and Wagenhofer, A. 2003. Following the money: The enron failure and the state of corporate disclosure. By AEI-Brookings

Joint Center for regulatory studies. Washington D.C., USA. Available from: http://www.sciencedirect.com/science/article/pii/S002070630900020X[Accessed 11 February 2015]

Berg, B. L. 1998. *Qualitative research methods for the social sciences*. (3rd Ed.). Boston: Allyn & Bacon.

Beuselinck, C., Joos, P., Khurana, I., & Meulen, S. V. 2009. Mandatory adoption of IFRS and analysts forecasts information properties'. SSRN eLibrary.

Black, T.R. 1999. Doing quantitative research in the social sciences: an integrated approach to research design, measurement and statistics. London: Sage Publications

Bleck, A., & Liu, X. 2007. Market transparency and the accounting regime. *Journal of Accounting Research,* 45 (2): 229-256.

Booyse, J.J., Schulze, S., Bester, G., Mellet, S.M., Lemmer, E.M., Roelfse, J.J., & Landman, W.A. 2002. *Research in education.* Pretoria: University of South Africa.

Bordens, K.S. & Abbott, B.B. 2011. Research design and methods: A process Approach, 8th Edition. International Edition Mc Graw - Hill Companies Inc.

Brown, P., & Tarca, A. 2007. 'Achieving high quality, comparable financial reporting'*:* A review of independent enforcement bodies in Australia and the United Kingdom', *Abacus*, 43 (4): 438-473.

Brüggemann, U., Daske, H., Homburg, C., & Pope, P. F. 2009. How do individual investors react to global IFRS adoption? *SSRN* eLibrary
Bryan, A., & Bell, E. 2003. *Business research method*, Oxford University press, Oxford, UK

Bryant, H. L., & Haigh, M. S. 2002. *Bid-Ask spreads in commodity futures markets* [online]. The University of Maryland, College Park. Available from: http://sard.ruc.edu.cn/zengyinchu/files/Kecheng/Agricultural%20Market%20and%20Distribution/research%20papers/BID-SK%20SPREADS%20IN%20COMMODITY%20FUTURES%20MARKETS.pdf [Accessed 15 March 2014]

Byard, D., Li, Y. & Yu, Y. 2011. The Effect of mandatory IFRS adoption on financial analysts' information environment, *Journal of Accounting Research*, 49 (1): 69-96

Bryan, A. & Bell, E. 2007. *Business research method*, Oxford University press, Oxford, UK

Burns, N., & Bush, H. 2009. A Research guideline: methods and techniques. In S. M, P. L, & T. A, *Research Methods for Business Students (5th ed).* Britain: Pitman Publishing Imprint

Burns, N. & Grove, S. 1993. The practice of nursing research: conduct, critique and utilization (2nd ed). W.B.Saunders: Philadelphia, Pennsylvania, USA.

Cai, F. & Wong, H. 2010. The effect of IFRS adoption on global market integration, *International Business & Economics Research Journal*, 9(10): 25-34

Canadian Institute of Chartered Accountants. 2006. *Fair value, historical cost, replacement cost* [online]. How assets and liabilities should be measured on initial recognition'. Accounting Standards Board. Available from: http://www.cica.ca/multimedia/Download_Library/Standards/Accounting/English/e_FairValueArticle.pdf [Accessed 5 March 2014]

Capkun, V., A. Cazavan-Jeny, T., Jeanjean & L. A. Weiss, 2007. Transition to IFRS: Value Relevance and Earnings Management. Working paper, HEC, ESSEC and Georgetown University

Case, D.O. 2002. *Looking for information: a survey of research on information seeking, needs, and behaviour.* Amsterdam: Academic Press

Casualty Actuarial Society. 2000. Casualty actuarial society, research
Chasan, E. 2008. Lifting the Lid: *Is fair value accounting really fair?* Available from: http://www.reuters.com/article/companyNews/idUSN2632669820080226 [Accessed 15 March 2014]

CESR (Committee of European Securities Regulations). 2002. Proposed statement of principles of enforcements of accounting standards in Europe. Available from: http://www.cesr-eu.org/data/document/02_188b.pdf [Accessed 2 March 2014]

Clarkson, P., Hanna, J.D., Richardson, G.D. & Thompson, R. 2008. 'The impact of IFRS adoption on the value relevance of book value and earnings', Working paper, University of Queensland

Clarkson, P., Hanna, J. D., Richardson, G. D., & Thompson, R. 2011. The impact of IFRS adoption on the value relevance of book value and earnings. *Journal of Contemporary Accounting and Economics* 7 (1): 1–17

Cobbold, E.A., Akobour-Debrah, K. & Kommey, F.K. 2008. An examination of financial reporting standards of SMEs in Ghana. University of Ghana Business School, Legon.

Cohen, L., Marion, L., & Morison, K. 2000. Research methods in education. 5th ed. London: Routledge Falmer. Available from: http://knowledgeportal.pakteachers.org/sites/knowledgeportal.pakteachers.org/files/resources/RESEARCH%20METHOD%20COHEN%20ok.pdf [Accessed 12 March 2015]

Cooper, D. R. & Schindler, P. S. 2003. *Business research methods.* 8th Edition. New York: McGraw Hill.

Cooper, D. R. & Schindler, P. S. 2010. *Business research methods. (11*th Edition). New York: McGraw Hill

Creswell, J. W. 2003. *Research design: qualitative, quantitative and mixed methods approaches. (2*nd ed). Thousand Oaks: Sage.

Crowther, D. & Lancaster, G. 2009. *Research methods: a concise introduction to research in management and business consultancy.* (2nd ed). London: Elsevier Ltd. Available from: http://www.lib.berkeley.edu/BUSI/new_books.html[Accessed 12 March 2015]

D'Souza, D. 2008. *Fair value accounting is fair* [online]. The Hindu Business Line.Availablefrom:http://www.thehindubusinessline.com/mentor/2008/10/20/stories/2008102051001300.htm [Accessed 12 March 2014]

Daske, H., Hail, I., Leuz, C., & Verdi, R. 2007. *Mandatory IFRS reporting around the world: early evidence on the economic consequences* [online]. Working paper, University of Chicago, 2007. Available from: http//papers.ssrn.com/sol3/papers.cfm?abstract_id=1024240 [Accessed 15 March 2014]

Daske, H., Hail, L., Leuz, C. & Verdi, R. S. 2008. Mandatory IFRS reporting around the world: Early evidence on the economic consequences. *Journal of Accounting Research*, 46 (5): 1085-1142.

Deloitte & Touche LLP, 1997. *Comment on the draft statement of principles*, a*griculture* [online]. Deloitte ToucheTohmatsu International. Available from: www.iasplus.com/dttletr/comment.htm [Accessed 12 March 2014]

Deloitte & Touche LLP, 2009a. *Simplified financial reporting – IASB provides relief for SMEs* [online]. Available from: http://www.deloitte.com/dtt/cda/doc/content/hu(en)_IFRS_simplified_07212009.pdf [Accessed 4 April 2014]

Deloitte & Touche LLP, 2009b. *International Financial Reporting Interpretation Committee Agenda* [online]. IAS 41: Fair value measurement in agriculture. Available from: http://www.iasplus.com/ifric/ias41fairvalue.htm [Accessed 4 April 2014]

Deloitte & Touche LLP, 2008. 2008 IFRS survey- where are we today? Available from: http://www.iasplus.com/en/binary/dttpubs/2008ifrssurvey.pdf[Accessed 4 April 2014]

Deloitte Touche Tohmatsu & Pricewaterhouse Coopers. 2012. IAS plus – Use of IFRS by jurisdiction – domestic listed and unlisted companies. Available from:http://www.pwc.com/us/en/issues/ifrs-reporting/country-adoption/index.jhtml [Accessed 4 April 2014]

Deloitte Touche Tohmatsu Limited. 2012*. IAS plus* [online]. Available from: http://www.iasplus.com [Accessed 4 April 2014]

Denscombe, M. 2007. *The good research guide: for small scale social research.* Bershire: Open University Press. Available from: http://www.amazon.com/The-Good-Research-Guide-small-scale/dp/0335241387[Accessed 12 March 2015]

deVaus, D. A. 2002. Surveys in social research. (5th ed.) London: Routlege. Available from:http://www2.warwick.ac.uk/fac/soc/sociology/pg/currentmasterstudents3/mamodules/home/mh201213.doc[Accessed 12 March 2015]

Doron, N. & Stephen, P. 2008. Principles for the application of fair value accounting. The Center for Excellence in Accounting and Security Analysis *White Paper Number Two*

Domfeh, K. A. 2013. *Deloitte engages SMEs in global financial reporting standards* [online]. Available from: http://www.modernghana.com/news/444894/1/deloitte-engages-smes-in-global-financial-report.html [Accessed 12 March 2013]

Dowling, C. and Godfrey, J. 2001. AASB sows the seeds of change: a survey of SGARA measurement methods'. *Australian Accounting Review* 11(1), 45-51.

Elad, C. 2004. Fair value accounting in the agricultural sector: some implications for international accounting harmonisation. *European Accounting Review*, 13 (4): 621 – 641.

Elad, C. 2007. Fair value accounting and fair trade: an analysis of the role of International Accounting Standard No. 41 in social conflict. *Socio-Economic Review*. Oxford University Press and the Society for the Advancement of Socio-Economics. Available from: www.ser.oxfordjournals.org/cgi/content/full/mwm013v1 [Accessed 20 March 2014]

Elad, C. & Harbohn, K. 2011. Implementing fair value accounting in the agriculture sector. The Institute of Chartered Accountants of Scotland. Edinburgh: Scotland

Eldabi, T., Irani, Z., Paul, R.J., &. Love, P.E.D. 2002. Quantitative and qualitative decision-making methods in simulation modeling. *Management Decision,* 40 (1), 64-73.

Epstein, B. J. & Jermakowicz, E.K. 2007. International Financial Reporting Standards - Interpretation and Application, John Wiley and sons Inc.

Epstein, J. B. 2009. 'The economic effects of IFRS adoption', *The CPA Journal*, 79 (3) 26-31. Available from: Available from: http://www.fasb.org/proposals/principles-based_approach.pdf [Accessed 10 April 2015]

Ernst & Young. 2007. Invitation to comment – discussion paper "Fair value measurements". London. Available from: http://www.ey.com/Publication/vwLUAssets/Assurance_CL_on_DP_FVM/$file/Assurance_CL_on_DP_FVM.pdf  [Accessed 5 April 2014]

Fabricant, S. 1936. Revaluation of fixed assets, 1925-1934; *National Bureau of Economic Research.* Available from: hhtpp//www.nber.org/chapters/c4318 [Accessed 20 March 2014]

FAO (Food and Agriculture Organization. 2000. *FAO statement on biotechnology* [online]. Biotechnology in food and agriculture. Available from: http://www.bing.com/search?q=Food+and+Agriculture+Organization+%28FAO%29.+2000.+FAO+Statement+on+Biotechnology&src=IE-SearchBox&FORM=IE8SRC [Accessed 12 March 2013]

FAO (Food and Agriculture Organization). 2004. Strengthening Agri-business farm linkages in Africa: Rome: Available from: http://www.fao.org/docrep/008/y5785e/y5785e00.htm [Accessed 12 March 2013]

FASB (Financial Accounting Standards Board). 2000. *Using cash flow information and present value in accounting measurements.* Statement of financial accounting concepts No. 7., Norwalk: FASB *Financial Accounting Standards Board (FASB). 2004. Minutes of the November 30, 2004 FVM Board Meeting. Available from: http://www.fasb.org/jsp/FASB/Page/11-30-04_fvm.pdf [Accessed 5 April 2014]*

FASB (Financial Accounting Standards Board). 2008. Fair value measurements. Statement of Financial Accounting Standards No. 157. FASB. Available from: http://www.fasb.org. [Accessed 30 April 2014]

Fisher, K. 1993. *Leading Self-directed work teams: A guide to developing new team leadership skills.* Megraw Hill

Florou, A. & Pope, P. F. 2012. Mandatory IFRS adoption and investor asset allocation decisions. *The Accounting Review*, forthcoming

Foster, J. M. & Upton, W. S. 2001. *Measuring fair value* [online]. Understanding the issues *3* (Series 1). Available from: http://72.3.243.42/articles&reports/UI_vol3_se ries1.pdf [Accessed 20 March 2014]

Fox, A, Helliar, C., Veneziani, M., & Hannah, G. 2013, 'The costs and benefits of IFRS implementation in the UK and Italy', *Journal of Applied Accounting Research*, 14 (1)

FRAB (Financial Reporting Advisory Board). 2007. H.M. Treasury. FRAB (85) 07. Available from: www.hm-treasury.gov.uk/d/frab85_ias41.pdf [Accessed on 6th February 2015]

Frees, E. W. 1996. Data analysis using regression model; *the Business Perspective*. New Jersey: Prentice Hall, Englewood Cliffs.

Frost, C., Gordon, E. & Hayes, A. 2006. Stock exchange disclosure and market development: An analysis of 50 international exchanges. *Journal of Accounting Research* 44: 437–483*.*

FSF (Financial Standards Foundation). 2009. Kenya: International Financial Reporting Standards. Available from:

http://www.estandardsforum.org/kenya/standards/internationalfinancial-reporting-standards [Accessed on 6th February 2015]

Gabriele, G. 2010. IFRS Adoption in the E.U., accounting harmonization and market efficiency: *a review, Economics and Quantitative Methodsgf1002*, Department of Economics, University of Insubria.

Gassen, J. & Schwedler, K. 2010. The decision usefulness of financial accounting measurement concepts: Evidence from an Online Survey of Professional Investors and Their Advisors', *European Accounting Review*, 19, 495-509.

Gassen, J. & Sellhorn, T. 2006. Applying IFRS in Germany - determinants and consequences. Betriebswirtschaftliche Forschung und Praxis 58(4).

Georgio, O. & Jack, L. 2008. Gaining legitimacy: where has fair value accounting come from? *Annual Accounting and Business History Research Unit Twentieth*. Cardiff: Cardiff Business School.

GHACAMCC (Ghana Cameroon Chamber of Commerce). 2012. Education perspectives. Available from: http://www.ghacamcc.org/education-perspectives/
[ Accessed 20 April 2014]

Gibson, J. 2005. Community resources: Intellectual property, international trade and protection of traditional knowledge [online]. 16 5 Ashgate Publishing Company.Availablefrom:http://www.bsos.umd.edu/gvpt/lpbr/subpages/reviews/gibson 0506.htm [Accessed 10 April 2014]

Gigler, F. Kanodia, C. H. & Venugopalan, R. 2007. Assessing the information content of market-to-market accounting with mixed attributes: the case of cash flow hedges'. *Journal of Accounting Research*, 45 (2): 257-276.

Ghauri, P. & Gronhang, K. 2005. *Research Methods in Business Studies.* England, Prentice Hall, UK.

Godfrey, J., Hodgson, A. Holmes, S. & Tarca, A. 2006. *Accounting theory (sixth edition).* Milton Qld: John Wiley and Sons Australia, Ltd.

Golafshani, N. 2003. Understanding reliability and validity in qualitative research. The qualitative report, 8(4), 597-606. Available from: http://www.nova.edu/sss/QR/QR8-4/golafshani.pdf. htm [Accessed 12 April 2014]

Goodwin, J., Ahmed, K. & Heaney, R. 2008. The effects of International Financial Reporting Standards on the accounts and accounting quality of Australian firms: A retrospective study. *Journal of Contemporary Accounting and Economics* 4 (2): 89–119.

Graham, J. R., Harvey, C. R., & Rajgopal, S. 2005. The economic implications of corporate financial reporting; *Journal of Accounting and Economics*, vol. 40, no. 1 – 3 pp. pp. 3 - 73

Graziano, A.M. & Rawlin, M. L. 2004. Research Methods: A process of enquiry. 5th ed. Harlow: Pearson education Group p. 77.

Guggiola, G. 2010. IFRS adoption in the EU: Accounting harmonization and markets efficiency: *A Review*, University of Insubria, Varese, Italy.
Hague, P., Hague, N. & Morgan, A. C. 2004. *Market research in practice - A Guide to the basics.* London: Kogan Page.

Heidhues, E & Patel, C. 2008. Convergence of accounting standards in Germany: biases and challenges, 10th International conference on accounting & business 2008, China : East China University of Science & Technology, 52.

Holloway, I. & Wheeler, S. 2002. Qualitative research in nursing. (2nd edition) Oxford: Blackwell Available from: Science http://www.ukessays.com/essays/nursing/organisation-of-staff-in-the-emergency-department-nursing-essay.php#ixzz3cg31ljgW[Accessed 10 June 2015]

Hope, O.K. 2003. Disclosure practices, enforcement of accounting standards and analysts forecast accuracy: An international study. *Journal of Accounting Research,* 41 (2): 235-272

Horton, J., Serafeim, G. & Serafeim, I. 2012. Does mandatory IFRS adoption improve the information environment*?* Available from: http://ssrn.com/abstract=1264101[Accessed 10 April 2014]

Hull, J. C. 2008. *Fundamentals of futures, options and other derivatives. Sixth Edition.* New Jersey. Pearson Prentice Hall

Hung, M. Y. & Subramanyam, K. R.  2007. Financial statement effects of adopting International Accounting Standards: The Case of Germany. *Review of Accounting Studies*: 623-658

IASB (International Accounting Standards Board).  2004a. International Accounting Standard 16 Property, Plant and Equipment, Available from: http://eifrs.ifrs.org[Accessed 12 March 2013]

IASB (International Accounting Standards Board).  2004b. International Accounting Standard 38 *Intangible Assets* [online]. Available from: http://eifrs.ifrs.org[Accessed 10 April 2014]

IASB (International Accounting Standards Board).  2004c. International Accounting Standard 36 *Impairment of Assets* [online]. Available from: http://eifrs.ifrs.org[Accessed 10 April 2014]

IASB (International Accounting Standards Board). 2006a. *Fair value measurements Part 1: Invitation to comment and relevant IFRS guidance.* London. IASCF

IASB (International Accounting Standards Board). 2006b. *Reporting compliance with IFRSs* [online]. Annual improvement process. Available from: http://www.iasb.org/NR/rdonlyres/EF9A4637-C464-4FB2-AEDD-F632BAC166E/0/AIP0611b02aobs.pdf [Accessed 19 April 2014]

IASB (International Accounting Standards Board). 2007. *Exposure draft: International Financial Reporting Standard for Small and Medium-sized Entities.* London. IASCF

IASB (International Accounting Standards Board). 2008a. Discussion Paper Preliminary Views on Revenue Recognition in Contracts with Customers. Available from:http://www.iasb.org/NR/rdonlyres/0E3D5E00-B961-42F0-BA64-AB1D20BB9FE9/0/DP_PreliminaryViewsRevenueRecognition1208.pdf [Accessed10 April 2014]

IASB (International Accounting Standards Board). 2008b. Exposure draft of an improved conceptual framework for financial reporting. Available from: http://www.iasb.org pdf  [Accessed 10 April 2014]

IASB (International Accounting Standards Board). 2009a. International Financial Reporting Standards. London. IASCF

• The framework for the preparation and presentation of financial statements.

• IAS 12, Income taxes

• IAS 16, Property Plant and Equipment

• IAS 17, Leases

• IAS 20, Grants

• IAS 23 Borrowing costs

• IAS 37, Contingent liabilities

• IAS 38, Intangible assets

• IAS 41, Agriculture

IASB (International Accounting Standards Board). 2009b. *Exposure draft ED/2009/5*, fair value measurement. London. IASCF

IASB (International Accounting Standards Board). 2009c. International Financial Reporting Standard for Small and Medium-sized entities (IFRS for SMEs). London. IASCF

IASB (International Accounting Standards Board). 2010. The conceptual framework for financial reporting, available from: http://eifrs.ifrs.org [Accessed 20 March 2014]

IASB (International Accounting Standards Board). 2011. International Financial Reporting Standard 13 *"*Fair value measurement", available from: http://eifrs.ifrs.org[Accessed 10 May 2014]

IASB (International Accounting Standards Board). 2012a. International Financial Reporting Standard (IFRS) No. 13 Fair value measurement. IASB: London, UK: Available from: http://media.ifrs.org/2012/Updates/IASB-Update-December-2012.pdf [Accessed 12 March 2013]

IASB (International Accounting Standards Board). 2012b. *Exposure draft: International Financial Reporting Standard for Small and Medium-sized Entities* [online]. London. IASCF. Available from: ttp://www.bing.com/search?q=International+Accounting+Standards+Board+%28IASB %29.+2012.+Exposure+Draft%3A+International+Financial+Reporting+Standard+for+

Small+and+Medium-sized+Entities.++London.+IASCF.&src=IE-SearchBox&FORM=IE8SRC[Accessed 12 March 2013]

IASB (International Accounting Standards Board). 2013a. IFRS foundation: Training material for the IFRS for SMEs issued by the International Accounting Standards Board on 9 July 2009 Available from: http://www.ifrs.org/IFRS-for-SMEs/Documents/IFRS%20for%20SMEs%20Modules/Module_34_Specialised_Activities__version%202013.pdf [Accessed 5 October 2014]

IASB (International Accounting Standards Board). 2013b. International Financial Reporting Standard 13 "Fair value measurement", IASPlus. Available from: http://www.iasplus.com/en/standards/ifrs/ifrs13 [Accessed 11 December 2014]

IASB (International Accounting Standards Board). 2015. 2015 Amendments to the International Financial Reporting Standards for Small and Medium-sized Entities (IFRS for SMEs). Available from: http://www.ifrs.org/IFRS-for-SMEs/Documents/IFRS%20for%20SMEs%20May%202015/2015_Amendments%20to%20IFRS%20for%20SMEs_Standard.pdf [Accessed 8 October 2015]

IASC (International Accounting Standards Committee). 2000. Comments letters on exposure draft, E65 Agriculture. London. IASCF

Iatridis, G. 2010. The Post-adoption effects of the implementation of International Financial Reporting Standards in Greece. *Journal of International Accounting Auditing & Taxation*, 19 (1): 55

Ibert, J., Philippe, B., Carole, D. & Jean-Marc, X. 2001. Data collection and managing the data source. London: *SAGE Publications*.

ICAEW (Institute of Chartered Accountants in England and Wales). 2007a. *EU implementation of IFRS and the fair value directive; A report for the European Commission.*

ICAEW (Institute of Chartered Accountant of England and Wales). 2007b. An IFRS for Small and Medium-Sized Entities. Available from: http://www.icaew.com/index.cfm/route/146670/icaew_ga/pdf [Accessed 10 April 2014]

IFAC (International Federation of Accountants). 2006. *Micro-entity financial reporting: perspectives of preparers and users* [online]. New York. Small and Medium Practices Committee. Available from: www.ifac.org/members/.../SMP_IFAC_Micro-entity.pdf [Accessed 5 May 2014]

IFAC (International Federation of Accountants). 2010. *Declaration of Nairobi* [online]. Available from: http://www.ifac.org/sites/default/files/DECLARATION_OF_NAIROBI.doc pdf [Accessed 5 May 2014]

Institute of Chartered Accountants Ghana 2010. Exposure draft on International Financial Reporting Standards for Small and Medium Sized-entities

Institute of Chartered Accountants Ghana 2015. List of paid up practitioners of the Institute. Available from: http://www.icagh.com/file/List-of-Practitioners-June-2015.pdf[Accessed 12 June 2015]

IFPRI (International Food Policy Research Institute). 2008. *Ethiopia's commodity exchange opens its doors* [online]. Available from: http//www.ifpri.org/pressrelease/ethiopias-commodity-exchange-opens-its-doors  [Accessed 5 May 2014]

Jackson, H. E. & Roe, M. J. 2009. *Public and private enforcement of securities laws* [online]. Resource based evidence from Harvard Law School. Available from: http://www.law.harvard.edu/programs/olin_centre [Accessed 20 March 2014]

James, W.D. 2008. Performance evaluation of VIP latrines in the Upper West Region of Ghana. MSC (Environmental Engineering) thesis. Michigan Technological University. Available from: http://www.mtu.edu/peacecorps/programs/civil/pdfs/james-dumpert-thesis-final.pdf [Accessed 08 April 2013]

James M.L. 2011. Integrating International Financial Reporting Standards into the accounting curriculum: strategies, beneficiaries and challenges, California state University, Los Angeles, p127

Jarnagin, B. D. 2008. *US Master GAAP Guide*. New York. CCH a Wolters Kluwer business.

Jermakowicz, E. 2004. Effects of Adoption of International Financial Reporting Standards in Belgium: The evidence from BEL-20 Companies', *Accounting in Europe*, l (1): 51-70

Jermakowicz, E.K., & Gornik-Tomaszewski, S. 2006. Implementing IFRS from the perspective of EU publicly traded companies, *Journal of International Accounting Auditing & Taxation*, 15 (2): 170

Jones, C. R. 2010. IFRS Adoption: Some general issues to remember, *CPA Journal* (July 2010) 36-38

Joshi, P.L., Bremser, W.G. & Al-Ajmi, J. 2008. *Perceptions of accounting professionals in the adoption and implementation of a single set of global accounting standards* [online]: Evidence from Bahrain. *Advances in Accounting*, 24 (1), 41-48. Available from: http://dx.doi.org/10.1016/j.adiac.2008.05.007 [Accessed 20 March 2014]

Joppe, M. 2000. The research process. Available from: http://www.ryerson.ca/˜mjoppe/rp.htm [Accessed 2 November 2014]

Kayanula D. & Quartey, P. 2000. The policy environment for promoting small and medium sized enterprise in Ghana and Malawi. *Finance and Development Research Programme Working Paper. Series No.15.*

Kent, R. 2007. *Marketing research approaches, Methods and applications in Europe.* London: Thomson Learning

Klapper, L. F., & Love, I. 2002. Corporate governance, investor protection and performance in emerging markets. The World Bank Working Paper No. 2818. Available from:http://www-wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/2002/05/03/000094946_020 41804272577/Rendered/PDF/multi0page.pdf[Accessed 11 February 2015]

Kothari, S.P. 2000. The role of financial reporting in reducing financial risks in the market. In building an infrastructure for financial stability. Edited by E.S. Rosengren and J.S. Jordan. Federal Reserve Bank of Boston Conference Series No.44: 89-102. http://www.mit.edu/~kothari/attach/Kothari%20CV.pdf [Accessed 12 February 2015]

Kothari, S.P. & Lester, R. 2011. The role of accounting in the financial crisis: lessons for the future. Working Paper.

Kotler, P. & Armstrong, G. 2009. Principles of marketing (13th edition). New Jersey: Prentice Hall imprint of Pearson.sons for the Future. *Accounting Horizons*, 26 (2): 335 -351

KPMG. 2006. International Financial Reporting Standards: The quest for a global language", pp. 1-47, available from:

http://www.kpmg.ca/en/ms/ifrs/documents/307_535_IFRS.pdf [Accessed 26 March 2014]

KPMG. 2011. *Integrated Reporting Performance* [online]: insight through Better Business Reporting, Issue. Available from: http://www.kpmg.com/Global/en/IssuesAndInsights/ArticlesPublications/Documents/road-to-integrated-reporting.pdf [Accessed 20 March 2014]

Kumekpor, T.K.B. 2002. *Research methods & techniques of social research*. Accra Ghana: Sonlife & Services.

Lambert, R., Leuz , C. & Verrecchia, R. 2007. Accounting information, disclosure, and the cost of capital. *Journal of Accounting Research*, 45: 385– 420

Lantto, A. M. & Sahlström, P. 2009. Impact of International Financial Reporting Standard adoption on key financial ratios*. Accounting and Finance*, 49: 341–361

Land, J. & Lang, M. H. 2002. 'Empirical evidence on the evolution of international earnings'. *Accounting Review*, 77(4): 115

Landsman, W.R., Peasnell, K., Pope, P., & Yeh, S. 2006. 'Which approach to accounting for employee stock options best reflects market pricing'?, *Review of Accounting Studies*, 11: 203–245

Landsman, W. R. 2007. Is fair value accounting information relevant and reliable? Evidence from capital market research. *Accounting and Business Research, Special Issue: International Accounting Policy Forum*, 19-30

Landsman, W. R., Maydew, E. L., & Thornock, J. R. 2011. 'The information content of annual earnings announcements and mandatory adoption of IFRS'. *Journal of Accounting and Economics, 53*(1-2): 34-54

Lang, M. H. & Lundholm, R. J. 1996. Corporate disclosure policy and analyst behavior. *The Accounting Review, 71*(4): 467-492

La Porta, R., Lopez-de-Silanes, F., Shleifer, A. & Vishny, R. W. 1998. Law and finance, Journal of Political Economy 106 (6): 1113-1155.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A. & Vishny, R. W. 2000. Investor protection and corporate governance. Journal of Financial Economics 58: 3-27. Available from: http://onlinelibrary.wiley.com/doi/10.1111/1540-6261.00457/full [Accessed 11 February 2015]

Lantto, A. & Sahlström, P. 2009. Impact of International Financial Reporting Standard adoption on key financial ratios, *Accounting and Finance*, 49: 341-361.

La Porta, R., Lopez-De-Silanes, F., Shleifer, A., & Vishny, R.W. 1998. 'Law and finance'. *Journal of Political Economy*, 106(6): 1113-55.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A. & Vishny, R. 1999. The quality of government. *Journal of Law, Economics and Organization* 15: 222-279.

Larson, R. & Street, D. 2004. Convergence with IFRS in an expanding Europe: progress and obstacles identified by large accounting firms' survey, *Journal of International Accounting, Auditing and Taxation*, 13: 89-119.

Laux, C. & Leuz, C. 2009. The crisis of fair-value accounting: Making sense of the recent debate, Accounting, Organizations and Society, 34: 826–834.

Lee, E., Walker, M., & Christensen, H. B. 2008. The impact of mandatory IFRS adoption by the EU on the cost of equity capital. Working Paper, University of Manchester.

Leuz, C. & Verrecchia, R. 2007. The economic consequences of increased disclosure. *Journal of Accounting Research*, 38(Supplement), 91-124.

Leuz, C., Nanda, D. & Wysocki, P. 2003. Earnings management and institutional factors: An international comparison. *Journal of Financial Economics,* 69(3): 505-527.

Li, S. 2010. Does mandatory adoption of International Financial Reporting Standards in the European Union reduce the cost of equity capital? *The Accounting Review*, 85(2): 607-636

Liang, P.J. & Wen, X. 2007. Accounting measurement basis, market mispricing, and firm investment efficiency, *Journal of Accounting Research*, 45 (1): 155-197.
Lind, D. A., Marchal, W. G & Wathen S. A. 2008. *Statistical Techniques in Business & Economics with Global Data Sets. (*13th Edition). New York. McGraw-Hill Irwin.

Madawaki, A. 2012. Adopting International Financial Reporting Standards in developing countries: The case of Nigeria*. International Journal of Business and Management.* 7(3).Available from: www.cosenet.org/ijbm [Accessed 20 March 2014]

Maina, P.N. 2010. Fair value reporting challenges facing small and medium-sized entities in the agricultural sector in Kenya [online]. MCom (Accounting) thesis. University of South Africa, Pretoria. Available from: http://uir.unisa.ac.za/handle/10500/4093 [Accessed 20 April 2013]

Majumdar, P. K. 2005. *Research methods in social science.* New Delhi: Viva Books Private Limited.

Malhotra, N. K. 2010. *Marketing Research, an Applied Orientation*, (6th ed.) Upper Saddle River, New Jersey: Pearsons Education.

Malhotra, N. K & Briks, F. D. 2003. *Marketing research, an applied approach, (second edition). England: Pearson Education Ltd.*

Merriam, S.B. 1994. Fallstudien som forkningsmedel, Lund, Sweden.

Millennium Challenge Contract (MCC). 2006. Executive summary with Ghana. Available                                                                                      from: ww.mcc.gov/mcc/bm.doc/080106_ghana_compact_summary[Accessed 12 March 2013]

Mouton, J. 2002. *Understanding social research* (3rd impression). Pretoria: Van Schaik Publishers.

Mugenda, A. G. 2008. *Social science research: Theory and principles.* Nairobi: Applied research & training services.

NBSSI (National Board for Small Scale Industries). 1990. *Supporting Micro &Small Scale Enterprises. A handbook on Enterprise Development Part 1*. NBSSI, Accra: Print Solutions.

Neter, J., Kutner, M. H., Nachtsheim, C. J. & Wasserman, W. 1996. Applied linear statistical models. 4. Chicago: Irwin

O'leary, Z. 2005. *Researching real-world problems: a guide to methods of inquiry*. London: Sage Publication Ltd.

Obalola, M.A. 2010.  Ethics and social responsibility in the Nigerian insurance industry: a multi-method approach. Corruption and economic growth in some selected transitional economies. PhD Thesis, Leicester, De Montfort University, UK. Available from: https://www.dora.dmu.ac.uk/bitstream/handle/2086/10118/Thesis.pdf?sequence=1[Accessed 12 March 2015]

Oka, T. & Shaw, I. 2000. Qualitative research in social work. Available at http://pweb.sophia.ac.jp/oka/papers/2000/qrsw/[Accessed 5 March 2014]

Oppenheim, A.N. 1996. Questionnaire design and attitude measurement. London: Heinemann. Available from: http://isites.harvard.edu/fs/docs/icb.topic1324197.files/OppenheimWeek1Selections.pdf[Accessed 12 March 2015]

Osei, B., Baah-Nuakoh, A., Tutu, K.A. & Sowa, N. K. 1993. Impact of structural adjustment on small-scale enterprises in Ghana, in Helmsing A.H.J and Kolstee T. H(eds), structural adjustment, financial policy and assistance programmes in Africa, Accra: IT Publications.

Paananen, M. & Lin, H. 2009. The development of accounting quality of IAS and IFRS over Time: The case of Germany, *Journal of International Accounting Research,* 8 (1): 31-55.

Pacter, P. 2004. *Financial reporting: SMEs - Setting out the approach* [online]. accountancy, 134(1332): 74DELOITTE, 2009: Use of IFRSs by jurisdiction. Available from: http://www.iasplus.com/ country/useias.htm [Accessed 20 March 2014]

Penman, S. H. 2007. Financial reporting quality: Is fair value a plus or a minus? *Accounting and Business Research,* Special Issue: International Accounting Policy Forum,33-44

Pervez, G. & Kjell, G. 2010. *Research methods in business studies*, (4th ed.) London: FT -Pearson

PriceWaterhouse Coopers (PWC). 2009. A Practical guide to accounting for agricultural assets. Available from: www.pwc.com/ifrs [Accessed 20 March 2014]

PriceWaterhouse Coopers (PWC). 2011. IFRS adoption by country. Available from: http://www.pwc.com/us/en/issues/ifrs-reporting/country-adoption/index.jhtml  [Accessed 20 March 2014]

PriceWaterHouse Coopers (PWC). 2013. *Corporate governance* - King III report - Introduction and overview. Available from: http://www.pwc.co.za/en/king3/index.jhtm [Accessed 20 March 2014]

POB (Professional Oversight Board). 2006. Review of how accountants support the needs of small and medium-sized companies and their stakeholders, Professional Oversight Board, Financial Reporting Council

Rahman, M.Z. 2000. Accounting standards in the East Asia region. Paper presented in the second Asian roundtable on corporate governance "The role of disclosure in strengthening corporate governance and accountability". Organized by OECD and World Bank. Hong Kong. Available from: ttp://www.sciencedirect.com/science/article/pii/S1052045714000460[Accessed 11 February 2015]

Rayman, R.A. 2007. Fair value accounting and the present value fallacy: the need for an alternative conceptual framework. *British Accounting Review*, 39: 211-225

Reading, A. J. et al., Todaro, M. P. and Smith, S. C. 2002. chap 1; chap 12 (pp 577-580)USIAD 2007, Audit of USAID/Ghana's program to increase private sector competitiveness. Audit report No. 7-641-07-002-P

Resnik, D.B. 2011. *What is ethics in research and why is it important?* Available from: http://www.niehs.nih.gov/research/resources/bioethics/whatis [Accessed 12 February 2015]

Richard, J. 2005. The concept of fair value in French and German accounting regulations from 1673 to 1914 and its consequences for the interpretation of the

stages of development of capitalist accounting. *Critical Perspectives on Accounting 16* , 825-850.

Ridley, S. 2011. Africa embraces IFRS. Available from: http://www.ifrs.org/News/Features/Africa+embraces+IFRS.htm [Accessed 10 April 2014]

ROG (Republic of Ghana). 2007. National economic and social development. *Ghana Vision 2020.* Accra: National economic and social development.

ROG (Republic of Ghana). 2009. Ministry of Trade and Industry. Trade quarterly Vol.1No.1.Availablefrom:http://www.bing.com/search?q=Republic+of+Ghana+%28RoG%29.+2009.+Trade+quarerly+Vol.+1+No.1&src=IE-SearchBox&FORM=IE8SRC[Accessed 12 March 2013]

ROG (Republic of Ghana). 2010. Ministry of Food and Agriculture. *Facts and figures,* Agriculture in Ghana. Available from:http://www.mofa.gov.gh/site/wp-content/uploads/2011/10/AGRICULTURE-IN-GHANA-FF-2010.pdf [Accessed 10 November 2013]

ROG (Republic of Ghana). 2012. Ghana Statistical Service (GSS). *Statistics for development and progress, Quarterly Gross Domestic Product Second Quarter:* Available from: http://www.statsghana.gov.gh/docfiles/GDP/quarterlygdp_2012_2nd_quarter.pdf [Accessed 12 March 2013]

ROG (Republic of Ghana). 2013a. Budget speech for the fiscal year 2013/2014. Availablefrom:https://search.yahoo.com/search;_ylt=AhtKMp8gZdcoZNX_KaTwpkGe vZx4?p=Republic+of+Ghana+%28RoG%29%2C+2013.+Budget+speech+for+the+fis

cal+year+2013%2F2014&toggle=1&cop=mss&ei=UTF-8&fr=yfp-t-901&fp=1[Accessed 12 March 2013]

ROG (Republic of Ghana). 2013b. *The budget statement and economic policy of the government of Ghana for the 2013/2014 financial year*, presented to Parliament on Tuesday, 5th March 2004 by Seth Terkper, Minister of Finance and Economic Planning (Accra: Assembly Press, Ghana Publishing Corporation)

ROG (Republic of Ghana). 2015a. Ministry of Food and Agriculture. Regional agriculture profile Ashanti: Ministry of Food and Agriculture

ROG (Republic of Ghana). 2015b. Ministry of Food and Agriculture. Regional Agriculture Profile Western: Ministry of Food and Agriculture

ROB (Republic of Ghana). 2017. Ministry of Finance and Economic Planning. 2017 budget statement and economic policy. Available from: http://www.mofep.gov.gh/sites/default/files/budget/2017%20BUDGET%20STATEMENT%20AND%20ECONOMIC%20POLICY.pdf [Accessed 3 April 2017]

Robson, C. 2002. *Real world research*: A resource for social scientists and practitioner-researchers (Second ed.). Oxford, UK: Wiley-Blackwell.

Ronen, J. 2008. To fair value or not to fair value: a broader perspective. *Abacus*, 44 (2):181-208

Rundfelt, R. 2007. Accounting Standards for unlisted entities*: Do we need special accounting standards for unlisted entities and, if so, what should they look like? Available from: http://www.snee.org/filer/papers/658.pdf [Accessed 15 December 2015]

Ryan, S.G. 2008. Fair value accounting: Understanding the Issues Raised by the Credit Crunch. *Working Paper.* New York: New York University.

Sanders, S. 2011. Evaluating the impact of fair value accounting on financial institutions: Implications for accounting standards setting and bank supervision. Federal Reserve Bank of Boston Working Paper No. QAU 12-01

Sarantakos, S. 2005. *Social research (Third Edition).* Macmillan: Palgrave, New York pp.211-213

Saudagaran, S.M., & Diga, J. G. 2000. The institutional environment of financial reporting regulation in ASEAN. The International Journal of Accounting 35 (1): 1-26. Available                                                                                               from: http://www.ingentaconnect.com/content/els/00207063/2000/00000035/00000001[Acc essed 11 February 2015]

Saunders, M., Lewis, P., & Thornhill, A. 2007. Research methods for business students. (4th Edition). Harlow: Pearson Education Limited.

Saunders, M., Lewis P., &Thornhill, A. 2009. *Research methods for business students.* (5thedition). New Jersey: Prentice Hall.

Saunders, M., Lewis, P. and Thornhill, A. 2003*. Research methods for business studies*, Edinburgh: Pean Education Ltd

Schipper, K. & Vincent, L. 2003. Earnings quality. *Accounting Horizons*, (17Supplement) pp. 97-110

Sekaran, U. 2000. *Research methods for business: A skills building approach* (2nd Edition**)**. New York: John Wiley and Sons, pp 31-36

Sekaran, U. 2003. *Research methods for business*- A Skill Building Approach. New York: John Wiley & Sons, Inc.

Sekaran, U. & Bougie, R. 2010. *Research methods for business*: A skill building approach (5th edition). New Jersey: John Wiley and Sons

Siqi, L. (2010). Does mandatory adoption of International Financial Reporting Standards in the European Union reduce the cost of equity capital? *The Accounting Review*, 85(2), 607-636. Available from: https://www.uts.edu.au/sites/default/files/Li_2016%20Accounting%20Researcher%20 Consortium.pdf[Accessed 10 April 2015]

Smith, J. 2009. Member of the International Accounting Standards Board (IASB), Remarks to the European Commission Conference, "Financial Reporting in a Changing World" Brussels, Belgium. Available from: http://ec.europa.eu/internal_market/accounting/docs/conference_052009/smith_en.pd f [Accessed 10 April 2014]

Solomon, G.Z. 2011. International Accounting standards committee. Available from: www.iasc.org [Accessed 10 May 2014]

Son, D. D., Marriott, N. & Marriott, P. 2006. Users' perceptions and uses of financial reports of small and medium companies (SMCs) in transitional economies. Qualitative evidence from Vietnam. *Qualitative Research in Accounting & Management*, . 3
(3): 218-235

Steffee, S. 2009. IFRS discrepancies vary by country, company, The internal auditor, 66 (4) pg 13

Staff of the Canadian Accounting Standards Board. 2005. *Measurement bases for financial accounting*- measurement on initial recognition. London: IASC Foundation

Sullivan, P. 2003. *Intercropping principles and production process – Agronomy systems guide* [online]. Appropriate technology transfer for rural areas. Available from: http://attra.ncat.org/attra-pub/PDF/intercrop.pdf [Accessed 10 April 2014]

Sylwia, G. & Steve, S.  2010. IFRS in the United States: Challenges and Opportunities.                     A               vailable                 from: http://www.thefreelibrary.com/IFRS+in+the+United+States%3a+Challenges+and+Op portunities.-a0232824952[Accessed 5 March 2014]

Tan, H., Wang, S. & Welker, M. 2011. Analyst following and forecast accuracy after mandated IFRS adoptions. *Journal of Accounting Research, 49*(5): 1307-1357

The World Bank. 2000. Poverty in the age of globalization. Available from: http://www1.worldbank.org/economicpolicy/globalization/documents/povertyglobalizati on.pdf [Accessed on 20th March 2014]

The World Bank. 2004. *Reports on the Observance of Standards and Codes* (ROSC). Available from: http://www.worldbank.org/ifa/rosc_cg_ind.pdf [Accessed 5 March 2014]

The World Bank.  2005a. Ghana: Country assistance review. (1 June 1995). Available from:   https://www.scribd.com/doc/49010482/Globalization-its-effects-on-agricultural-production-in-Ghana Accessed on 20th March 2014]

The World Bank. 2005b. *Report on Observance of Standards and Codes*, Ghana. Available                                                          from: http://siteresources.worldbank.org/FINANCIALSECTOR/Resources/2010_Report_on _the_Observance_of_Standards_and_Codes.pdf[Accessed on 20th March 2014]

The World Bank. 2010. *Report on the observance of Standards and Codes* (ROSC) on Kenya Accounting and Auditing Standards. Available from: https://www.worldbank.org/ifa/rosc_aa_ken_0111.pdf[Accessed on 20th March 2014]

The World Bank. 2010. *Report on the observance of Standards and Codes* (ROSC) on Ghana Corporate Governance Country Assessment. Available from: ttp://siteresources.worldbank.org/FINANCIALSECTOR/Resources/2010_Report_on_the_Observance_of_Standards_and_Codes.pdf [Accessed on 22th March 2014]

The World Bank. 2011. *Reports on the Observance of Standards and Codes* (ROSC). Available from: http://www.worldbank.org/ifa/rosc_aa.html [Accessed 5 March 2014]

Ting, Y.S. & Soo, C.M. 2005. . Fair value accounting–relevance, Reliability and progress in Malaysia. *University College Sedeya International.*

Tokar, M. 2005. Convergence and the implementation of a single set of global standards: the real-life challenge, *Accounting in Europe*, 2 (1): 47-68

Tomaszewski, S.G. & Showerman, S. 2010. IFRS in the United States: Challenges and opportunities. *Review of Business*, 59-71

Twumasi, P.A. 2002. Social research in rural communities. Accra: Ghana Universities Press.

Udofia, E. P. 2011. *Applied statistics with multivariate methods*. Enugu: Immaculate Publications Ltd.

UNCTAD (United Nations Conference on Trade and Development). 2002. Accounting Standards lag behind globalisation. Available from: http://www.unctad.org/Templates/Webflyer.asp?docID=3600&intItemID=2068&lang=1 [Accessed 3 April 2014]

UNCTAD (United Nation Conference on Trade and Development). 2007. Overview of the world's commodity exchanges 2006, Prepared by the UNCTAD Secretariat.

UNCTAD (United Nations Conference on Trade and Development). 2008. Conference proceedings held in New York and Geneva (27-29 May 2008)

Uzoagulu, A. E. 1998. *Practical guide to writing research and project reports in tertiary institutions.* Enugu, Nigeria: John Jacob's Classic Publishers Ltd'. Available from: http://vwwv.academicjournals.org/journal/IJSTER/article-abstract/8405B405316[Accessed 12 March 2015]

Volha, S. 2010. Fair value accounting. (BS- Thesis) submitted to Faculty of Business Administration, University of Iceland

Wang, J. & Yu, W. 2009. The information content of stock prices, reporting incentives and accounting standards: International evidence. *SSRN eLibrary*

Watanabe, I. 2007. The evolution of income accounting in the eighteenth and nineteenth century Britain. Osaka Keidai Konshu Vol.57 No. 5

Watts, R. L. 2006. What has the invisible hand achieved? Accounting and Business Research, 36 (special issue): 51-61

Williams, B. & Wilmshurst, T. 2008. Accounting for self-generating and regenerating asset–meeting the objectives. *Working Paper Series No: 3 / 2008.* School of Accounting and Corporate Governance, Faculty of Business, University of Tasmania. Available online at http://eprints.utas.edu.au/7035/1/WilliamsWilmshurstWPS3_2008.pdf [Accessed on 6th February 2015]

World Bank. 2000. ROSC: Review of accounting and auditing practices. Available from: http://www.worldbank.org/ifa/rosc_aa_overview.pdf[Accessed 11 February 2015]

Yichao, L. 2010. The study of the application status of fair value accounting in china. *International Journal of Business and Management*, 5(9)

Yin, R. K. 2009. Case study research, design and methods (4th Edition). Newbury Park, California: SAGE Publications.

Yu, G. 2009. Accounting standards and international portfolio holdings: Analysis of cross-border holdings following mandatory adoption of IFRS. *SSRN eLibrary*

Zeff, S.A. 1995. A perspective on the U.S. public/private-sector approach to the regulation of financial reporting. American Accounting Horizons 9 (1): 52-70. Available from:http://ejournal.narotama.ac.id/files/School%20of%20Accountancy.pdf[Accessed 11 February 2015]

Zhou H., Xiong,Y. & Ganguli, G. 2009. Does the adoption of international financial reporting standards restrain earnings management? Evidence from an emerging market, *Academy of Accounting and financial studies Journal*, 1-7

**Appendix A - Questionnaire   to accountants and preparers of financial statements**


**Participant information sheet**

25 February 2016

**Fair value implementation challenges facing small and medium-sized entities in the agricultural sector in Ghana**


**Dear prospective participant**

My name is Joseph Kwasi Agyemang and I am doing research supervised by Prof HC Wingard and Dr AA van Rooyen, both academics in the College of Accounting Sciences, towards an MPhil Accounting Science degree at the University of South Africa (Unisa). We are inviting you to participate in a study entitled: *Fair value accounting: implementation challenges facing small and medium-sized entities in the agricultural sector in Ghana.*

The aim of the study is to identify fair value implementation challenges facing small and medium-sized enterprises (SMEs) in the agricultural sector in Ghana. This will help to provide guidelines to these SMEs with the implementation of IFRS 13, *Fair Value Measurement* and IAS 41, *Agriculture.* Being a participant is voluntary and you are under no obligation to consent to participation. You may also withdraw at any time without penalty. Hard copies of your answers will be stored by the researcher for a period of five years in a locked cupboard in his office for future research or academic purposes; electronic information will be stored on a password protected computer. Future use of the stored data will be subject to further Research Ethics Review and approval if applicable. Information will be shredded once the five year period has expired while password protected electronic information will be removed from the computer permanently.

While there is no financial or other direct benefit in participating, your contribution will assist me to obtain insights as to fair value implementation challenges facing SMEs in the agricultural sector in Ghana. It will take about 20 minutes of your

time to complete the questionnaire. **We would greatly appreciate your contribution!**

This study has received written approval from the Research Ethics Committee of the College of Accounting Sciences at Unisa. If you would like to see the ethics approval letter, have any questions in respect of this study or want to receive a summary of the results, please contact me:

Joseph Kwasi Agyemang
africa197676@yahoo.com
+233244502770

**Questionnaire to accountants and preparers of financial statements**

Prior to 2013, agricultural firms prepared their financial statements in line with their respective country's codes. However, the International Accounting Standard Board (IASB) recommended that all agricultural firms worldwide had to adopt a standardised approach for preparing their financial statements. Financial Reporting Standards 13 (IFRS 13) was issued on 1 January 2013 and includes accounting standards for agricultural activity.

Although International Accounting Standard 41 (IAS 41) (issued 1 January 2003) requires the valuation of biological assets, from initial recognition up to the point of harvest, IFRS 13 focusses on the uniformity and comparability of fair value estimates in financial reporting. The two concepts are interconnected and can influence each other. However, SMEs in the agricultural sector in Ghana face fair value implementation challenges. Your views on IFRS 13 relating to agriculture will provide relevant information to the users of financial statements to take economic decisions by helping them to evaluate past, present and future events. It will also help the users or preparers of financial statements to confirm or correct their past evaluations. Responses to this questionnaire will also serve as a guide as to whether or not regulatory bodies should organise training or seminars for the accountants in the agricultural entities in Ghana for the successful implementation of IFRS 13 relating to agriculture.

Thank you for taking time to read this information sheet and for participating in this study.

**CONSENT TO PARTICIPATE IN THIS STUDY**

• I have read and understood the study as explained in the information sheet.

• I understand that my participation is voluntary and that I am free to withdraw at any time     without penalty.

- I am aware that the findings of this study will be anonymously processed into a research report, journal publications and/or conference proceedings.

**I understand and accept the above and will participate in this study.**

_____          _____
Signature                                Date

**SECTION A: BACKGROUND INFORMATION**

**A1.    Information regarding the business:**

a. Nature of business: ..................................................................................................

...............................................................................................................................

...............................................................................................................................

...............................................................................................................................

b. Stated capital

c. Number of employees

d. Gross income per annum

e. Net asset value

**A2.    Indicate your position:**
   a. Manager and accountant
   b. Accountant only
   c. Accounts clerk
   d. Other – please specify

**A3.    Indicate your highest level of education:**
   a. SSSCE/WASSCE
   b. Diploma
   c. First degree
   d. Postgraduate

   e. Professional qualification – please specify.................................................

   f. Other – please specify.................................................................................

**A4.** **How many years have you been preparing (been part of the process) accounts for the business?**
   a. Less than 2 years
   b. Between 2 and 5 years
   c. Between 6 and 10 years
   d. More than 10 years

**A5.** **Does the broad area of agricultural accounting interest you? Please provide an explanation.**

   a. Yes .................................................................................................................

   ..........................................................................................................................

   b. Slightly ...........................................................................................................

   ..........................................................................................................................

   c. No ...................................................................................................................

   ..........................................................................................................................

**A6.** **How many years of your professional experience have you been part of accounting activities for agricultural entities?**
   a. Very limited
   b. Less than 2 years
   c. Between 2 and 5 years
   d. Between 6 and 10 years
   e. More than 10 years

**A7.** **As an accountant, identify and explain some important   accounting information which you consider most important when presenting annual financial reports:**

   a. ...................................................................................................................

   ..........................................................................................................................

   ..........................................................................................................................

   b. ...................................................................................................................

   ..........................................................................................................................
   ..........................................................................................................................
   ..........................................................................................................................

c. ..................................................................................................................
..................................................................................................................
..................................................................................................................
d. ..................................................................................................................
..................................................................................................................

**A8.    When did the business adopt IFRS?**
a. Before 2008
b. Between 2008 and 2011
c. Since 2011
d. Not adopted
e. Not sure

**A9.    Has the business implemented the IFRS 13, *Fair Value Measurement*?**

a. Yes
b. No
c. Not sure

**A10a. If your answer to A9 was 'yes', kindly explain the difficulties encountered in    the implementation of IFRS 13.**

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**A10b. If your answer to A9 was 'no', kindly list the challenges encountered and explain why IFRS 13 was not implemented.**

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**SECTION B: FARM PROFILE**

**B1.** **Which one of the following best explains the type of farming operation?**

a. Family controlled
b. Private company
c. Joint venture

d. Other – please specify ...............................................................................

**B2.** **Which one of the following best explains the main farming activity of the business?**
a. Cash crops (i.e. cocoa, cotton, coffee)
b. Horticulture (i.e. flowers, nuts, spices)
c. Food crops (i.e. maize, wheat, rice)
d. Livestock (i.e. poultry, sheep, cattle)
e. Fisheries
f. Forestry

g. Other – please specify ..............................................................................

**B3.** **Which one of the following is the target market of the business?**

a. Household
b. Retail market
c. Wholesale market
d. Contract farming

e. Other – please specify ..............................................................................

**B4.** **Which of the following farming methods pertain to the business? (Choose the most relevant option)** .
a. Traditional
b. Rain-fed
c. Irrigation
d. Technology

e. Other – please specify ..............................................................................

**B5.** **Specify the IFRS 13/IAS 14 valuation approach applied by the business. (Choose only one option).**
a. **Cost approach** (valuation technique that reflects the amount currently required to replace the service capacity of an asset)

b. **Income approach** (valuation technique that converts future amounts to a single current amount)

c. **Market approach** (valuation technique that uses prices and other relevant information generated by market transactions which involve identical or comparable assets or liabilities)

d. Other – please specify ...................................................................

**B6. Indicate the most significant basis of accounting for agricultural produce of the business (Choose only one option).**

a. **Cash basis** (income and expenses are recorded in financial statements when the cash is actually received and paid)

b. **Accrual basis** (income and expenses are recorded in financial records when it becomes receivable or payable)

c. **Modified accrual basis** (a combination of the cash basis and the accrual basis)

d. Other – please specify ...................................................................

**B7. Indicate the method the business use to value/measure biological assets (Choose only one option).**

a. **Net present value** (biological assets are measured at the present discounted value of the future net cash inflows that the biological asset is expected to generate in the normal course of business)

b. **Historic cost** (biological assets are valued at the amount of cash or cash equivalents paid or the fair value of the consideration given to acquire them at the time of their acquisition)

c. **Fair value** (price that would be obtained to sell a biological asset at the measurement date)

d. **Net realisable value** (the amount likely to be received by the business if a biological asset is sold in a typical transaction minus any cost incurred in order to get the biological asset sold)

e. Other – please specify ...................................................................

## SECTION C: OBJECTIVES IN PREPARING FINANCIAL STATEMENTS

**In the following questions rank your answer as follows:**
5 – Extremely important; 4 – Very important; 3 – Of moderate importance; 2 – Of little importance; 1 – Not important

| 5 | 4 | 3 | 2 | 1 |
|---|---|---|---|---|

**C1. Importance of components of financial statements:**

| | 5 | 4 | 3 | 2 | 1 |
|---|---|---|---|---|---|
| 1.1 Statement of comprehensive income | | | | | |

| 1.2 | Statement of financial position | | | | | |
|---|---|---|---|---|---|---|
| 1.3 | Statement of cash flows | | | | | |
| 1.4 | Statement of changes in equity | | | | | |
| 1.5 | Notes and explanations to the financial statements | | | | | |

**C2.    Reasons for preparing financial statements:**

| 2.1 | Loan requirements | | | | | |
|---|---|---|---|---|---|---|
| 2.2 | Shareholders | | | | | |
| 2.3 | Tax compliance | | | | | |
| 2.4 | Decision making | | | | | |
| 2.5 | Compliance with accounting standards | | | | | |

## SECTION D: FAIR VALUE IMPLEMENTATION CHALLENGES

**In the following questions rank your answer as follows:**
5 – Strongly agree; 4 – Agree; 3 – Neutral; 2 – Disagree; 1 – Strongly disagree

| 5 | 4 | 3 | 2 | 1 |
|---|---|---|---|---|

**D1.    Knowledge of IFRS:**

| 1.1 | Preparers of financial statements in SMEs in the agricultural sector in Ghana have excellent knowledge of IFRS 13 | | | | | |
|---|---|---|---|---|---|---|
| 1.2 | IFRS 13 is complex and thus too difficult to enforce at the SMEs level in the agricultural sector | | | | | |
| 1.3 | Fair value implementation challenges have resulted in significantly better quality of financial reporting In Ghana | | | | | |

**D2.    Level of accounting education and training in Ghana:**

| 2.1 | There is a shortage of educational institutions | | | | | |
|---|---|---|---|---|---|---|
| 2.2 | There is limited access to training materials, seminars and workshops for working professionals | | | | | |
| 2.3 | There is a low level of public awareness by regulators and other stakeholders on IFRS | | | | | |
| 2.4 | Academic education does not focus on IFRS | | | | | |
| 2.5 | Academic education does not focus on agricultural accounting | | | | | |
| 2.6 | There is insufficient training and education for accounting personnel toward the implementation of IFRS 13 | | | | | |

**D3. Economic challenges in respect of fair value implementation facing SMEs in the agricultural sector in Ghana:**

| | | | | | |
|---|---|---|---|---|---|
| 3.1 A principle market does not exist and is not readily determinable | | | | | |
| 3.2 It is not possible to market the agricultural produce before further processing | | | | | |
| 3.3 The principle market is accessible only through middle traders or brokers | | | | | |
| 3.4 There is a lack of market information on prices of biological assets | | | | | |
| 3.5 There is no guaranteed market prices for farmers | | | | | |
| 3.6 High inflation that erodes benefits of exchange rate gains from exports | | | | | |
| 3.7 Frustration with the Ghanaian culture of not doing things according to schedule resulting in economic losses | | | | | |
| 3.8 The pricing discovery process is not transparent | | | | | |
| 3.9 The pricing discovery process is not understandable | | | | | |
| 3.10 A market does not exist for the harvested produce | | | | | |
| 3.11 A market does not exist for bearer biological assets (scrap market) | | | | | |

Comments: .......................................................................................................

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Thank you for your cooperation.

**Appendix B – Questionnaire to regulatory bodies**

25 February 2016

**Fair value implementation challenges facing small and medium-sized entities in the agricultural sector in Ghana**

**Dear prospective participant**

My name is Joseph Kwasi Agyemang and I am doing research supervised by Prof HC Wingard and Dr AA van Rooyen, both academics in the College of Accounting Sciences, towards an MPhil Accounting Sciences degree at the University of South Africa (Unisa). We are inviting you to participate in a study entitled: *Fair value implementation challenges facing small and medium-sized entities in the agricultural sector in Ghana.*

The aim of the study is to identify fair value implementation challenges facing small and medium-sized enterprises (SMEs) in the agricultural sector in Ghana. This will help to provide guidelines to these SMEs with the implementation of IFRS 13, *Fair Value Measurement* and IAS 41, *Agriculture.* Being a participant is voluntary and you are under no obligation to consent to participation. You may also withdraw at any time without penalty. Hard copies of your answers will be stored by the researcher for a period of five years in a locked cupboard in his office for future research or academic purposes; electronic information will be stored on a password protected computer. Future use of the stored data will be subject to further Research Ethics Review and approval if applicable. Information will be shredded once the five year period has expired while password protected electronic information will be removed from the computer permanently.

While there is no financial or other direct benefit in participating, your contribution will assist me to obtain insights as to fair value implementation challenges facing SMEs in

the agricultural sector in Ghana. It will take about 10 minutes of your time to complete the questionnaire. **We would greatly appreciate your contribution!**

This study has received written approval from the Research Ethics Committee of the College of Accounting Sciences at Unisa. If you would like to see the ethics approval letter, have any questions in respect of this study or want to receive a summary of the results, please contact me:

Joseph Kwasi Agyemang
africa197676@yahoo.com
+233244502770

**Questionnaire to regulatory bodies**

Prior to 2013, agricultural firms prepared their financial statements in line with their respective country's codes. However, the International Accounting Standard Board (IASB) recommended that all agricultural firms worldwide had to adopt a standardised approach for preparing their financial statements. Financial Reporting Standards 13 (IFRS 13) was issued on 1 January 2013 and includes accounting standards for agricultural activity.

Although International Accounting Standard 41 (IAS 41) (issued 1 January 2003) requires the valuation of biological assets, from initial recognition up to the point of harvest, IFRS 13 focusses on the uniformity and comparability of fair value estimates in financial reporting. The two concepts are interconnected and can influence each other. However, SMEs in the agricultural sector in Ghana face fair value implementation challenges. Your views on IFRS 13 relating to agriculture will provide relevant information to the users of financial statements to take economic decisions by helping them to evaluate past, present and future events. It will also help the users or preparers of financial statements to confirm or correct their past evaluations. Responses to this questionnaire will also serve as a guide as to whether or not regulatory bodies should organise training or seminars for the accountants in the agricultural entities in Ghana for the successful implementation of IFRS 13 relating to agriculture.

Thank you for taking time to read this information sheet and for participating in this study.

**CONSENT TO PARTICIPATE IN THIS STUDY**
- I have read and understood the study as explained in the information sheet.
- I understand that my participation is voluntary and that I am free to withdraw at any time without penalty.
- I am aware that the findings of this study will be anonymously processed into a research report, journal publications and/or conference proceedings.

**I <u>understand and accept the above</u> and will participate in this study.**

_____          _____
Signature                                                    Date

**SECTION A: BACKGROUND INFORMATION**

**A1.    To which of the following regulatory bodies do you belong to?**
   a.  The Institute of Chartered Accountants Ghana (ICAG)
   b.  Ghana Stock Exchange (GSE)
   c.  Chartered Accountants in audit firms performing audits on agricultural enterprises
   d.  Stock Exchange Commission (SEC)
   e.  Ghana Revenue Authority (GRA)
   f.  Other – please specify

**A2.    Please state you current position:**

   .............................................................................................................................

**A3.    Please state your highest professional/ academic qualification:**

   .............................................................................................................................

**A4.    What are the objectives of your office in promoting the implementation of IFRS 13, _Fair Value Measurement_ in Ghana?**

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   .............................................................................................................................

**A5.    In what year did your office initiate plans for the implementation of IFRS 13    by small and medium sized enterprises (SMEs) in the agricultural sector in    Ghana?**

   .............................................................................................................................

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**A6.** **List some of the activities your office has carried out in the past to support     effective implementation of IFRS 13:**

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## SECTION B: FAIR VALUE IMPLEMENTATION CHALLENGES

**In the following questions rank your answer as follows:**
5 – Strongly agree; 4 – Agree; 3 – Undecided; 2 – Disagree; 1 – Strongly disagree

| | 5 | 4 | 3 | 2 | 1 |
|---|---|---|---|---|---|
| **B1.** **Knowledge of IFRS:** | | | | | |
| 1.1 Preparers of financial statements in SMEs in the agricultural sector in Ghana have excellent knowledge of IFRS 13 | | | | | |
| 1.2 IFRS 13 is complex and thus too difficult to enforce at the SMEs level in the agricultural sector | | | | | |
| 1.3 Fair value implementation challenges have resulted in significantly better quality of financial reporting In Ghana | | | | | |
| **B2.** **Level of accounting education and training in Ghana:** | | | | | |
| 2.1 There is a shortage of educational institutions | | | | | |
| 2.2 There is limited access to training materials, seminars and workshops for working professionals | | | | | |
| 2.3 There is a low level of public awareness by regulators and other stakeholders on IFRS | | | | | |
| 2.4 Academic education does not focus on IFRS | | | | | |
| 2.5 Academic education does not focus on agricultural accounting | | | | | |
| 2.6 There is insufficient training and education for accounting personnel toward the implementation of IFRS 13 | | | | | |
| **B3.** **Existing laws on the implementation of IFRS 13/IAS 41 in the agricultural sector in Ghana:** | | | | | |
| 3.1 IFRS implementation costs are high | | | | | |
| 3.2 IFRS enforcement costs are high | | | | | |
| 3.3 Lack of adequately trained human resources makes enforcement difficult | | | | | |
| 3.4 Constant professional development is not well monitored | | | | | |
| 3.5 Absence of involvement of regulatory bodies makes enforcement difficult | | | | | |

| 3.6 | High inflation that erodes benefits of exchange rate gains from exports | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| 3.7 | Frustration with the Ghanaian culture of not doing things according to schedule resulting in economic losses | | | | | |
| 3.8 | There is a lack of methodical relationship between existing local laws and IFRS | | | | | |
| 3.9 | There is a lack of methodical relationship between regulatory systems of the country (i.e. between government and other regulatory structures) | | | | | |

**B4.    What in your opinion apart from the above, are the major challenges facing        regulatory bodies to ensure the enforcement of IFRS 13 of SMEs in the    agricultural sector in Ghana?**

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**B5.    How can these challenges be overcome?**

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**Other comments:**..................................................................................................................

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Thank you for your cooperation.

**Appendix C – Summary of responses: Questionnaire to accountants and preparers of financial statements**

**SECTION B: FARM PROFILE**

**B1.  Which one of the following best explains the type of farming operation?**

| | | |
|---|---|---|
| a. | Family controlled | 16 |
| b. | Private company | 65 |
| c. | Joint venture | 5 |
| | | 4 |
| d. | Other – please specify ............................................................. | |

**B2.  Which one of the following best explains the main farming activity of the business?**

| | | |
|---|---|---|
| a. | Cash crops (i.e. cocoa, cotton, coffee) | 15 |
| b. | Horticulture (i.e. flowers, nuts, spices) | 30 |
| c. | Food crops (i.e. maize, wheat, rice) | 24 |
| d. | Livestock (i.e. poultry, sheep, cattle) | 15 |
| e. | Fisheries | 15 |
| f. | Forestry | 6 |
| | | 0 |
| g. | Other – please specify ............................................................. | |

**B3.  Which one of the following is the target market of the business?**

| | | |
|---|---|---|
| a. | Household | 15 |
| b. | Retail market | 33 |
| c. | Wholesale market | 24 |
| d. | Contract farming | 18 |
| | | 0 |
| e. | Other – please specify ............................................................. | |

**B4.  Which of the following farming methods pertain to the business? (Choose the most relevant option)    .**

| | | |
|---|---|---|
| a. | Traditional | 24 |
| b. | Rain-fed | 30 |
| c. | Irrigation | 24 |
| d. | Technology | 12 |

e.   Other – please specify ....................................................................... | 0

**B5.   Specify the IFRS 13/IAS 14 valuation approach applied by the business. (Choose only one option).**

a.   **Cost approach** (valuation technique that reflects the amount currently required to replace the service capacity of an asset) | 24

b.   **Income approach** (valuation technique that converts future amounts to a single current amount) | 30

c.   **Market approach** (valuation technique that uses prices and other relevant information generated by market transactions which involve identical or comparable assets or liabilities) | 24

d.   Other – please specify ................................................................. | 12

**B6.   Indicate the most significant basis of accounting for agricultural produce of the business (Choose only one option).**

a.   **Cash basis** (income and expenses are recorded in financial statements when the cash is actually received and paid) | 29

b.   **Accrual basis** (income and expenses are recorded in financial records when it becomes receivable or payable) | 51

c.   **Modified accrual basis** (a combination of the cash basis and the accrual basis) | 10

d.   Other – please specify ................................................................. | 0

**B7.   Indicate the method the business use to value/measure biological assets (Choose only one option).**

a.   **Net present value** (biological assets are measured at the present discounted value of the future net cash inflows that the biological asset is expected to generate in the normal course of business) | 9

b.   **Historic cost** (biological assets are valued at the amount of cash or cash equivalents paid or the fair value of the consideration given to acquire them at the time of their acquisition) | 33

c.   **Fair value** (price that would be obtained to sell a biological asset at the measurement date) | 36

d.   **Net realisable value** (the amount likely to be received by the business if a biological asset is sold in a typical transaction minus any cost incurred in order to get the biological asset sold) | 12

e.   Other – please specify ................................................................. | 0

## SECTION C: OBJECTIVES IN PREPARING FINANCIAL STATEMENTS

**In the following questions rank your answer as follows:**
5 – Extremely important; 4 – Very important; 3 – Of moderate importance; 2 – Of little importance; 1 – Not important

**C1. Importance of components of financial statements:**

| | | 5 | 4 | 3 | 2 | 1 |
|---|---|---|---|---|---|---|
| 1.1 | Statement of comprehensive income | 4 | 86 | 0 | 0 | 0 |
| 1.2 | Statement of financial position | 4 | 86 | 0 | 0 | 0 |
| 1.3 | Statement of cash flows | 5 | 70 | 15 | 0 | 0 |
| 1.4 | Statement of changes in equity | 18 | 27 | 24 | 18 | 3 |
| 1.5 | Notes and explanations to the financial statements | 19 | 43 | 12 | 16 | 0 |

**C2. Reasons for preparing financial statements:**

| | | 5 | 4 | 3 | 2 | 1 |
|---|---|---|---|---|---|---|
| 2.1 | Loan requirements | 6 | 39 | 21 | 15 | 9 |
| 2.2 | Shareholders | 15 | 72 | 3 | 0 | 0 |
| 2.3 | Tax compliance | 18 | 39 | 15 | 6 | 12 |
| 2.4 | Decision making | 15 | 63 | 12 | 0 | 0 |
| 2.5 | Compliance with accounting standards | 18 | 30 | 21 | 15 | 6 |

## SECTION D: FAIR VALUE IMPLEMENTATION CHALLENGES

**In the following questions rank your answer as follows:**
5 – Strongly agree; 4 – Agree; 3 – Neutral; 2 – Disagree; 1 – Strongly disagree

**D1. Knowledge of IFRS:**

| | | 5 | 4 | 3 | 2 | 1 |
|---|---|---|---|---|---|---|
| 1.1 | Preparers of financial statements in SMEs in the agricultural sector in Ghana have excellent knowledge of IFRS 13 | 9 | 12 | 0 | 51 | 18 |
| 1.2 | IFRS 13 is complex and thus too difficult to enforce at the SMEs level in the agricultural sector | 12 | 33 | 30 | 9 | 6 |
| 1.3 | Fair value implementation challenges have resulted in significantly better quality of financial reporting In Ghana | 15 | 24 | 30 | 12 | 9 |

**D2. Level of accounting education and training in Ghana:**

| | | 5 | 4 | 3 | 2 | 1 |
|---|---|---|---|---|---|---|
| 2.1 | There is a shortage of shortage of educational institutions | 3 | 30 | 24 | 18 | 15 |
| 2.2 | There is limited access to training materials, seminars and workshops for working professionals | 15 | 51 | 19 | 3 | 2 |
| 2.3 | There is a low level of public awareness by | 6 | 59 | 6 | 10 | 9 |

| | | | | | |
|---|---|---|---|---|---|
| regulators and other stakeholders on IFRS | | | | | |
| 2.4 Academic education does not focus on IFRS | 9 | 36 | 24 | 12 | 9 |
| 2.5 Academic education does not focus on agricultural accounting | 12 | 69 | 4 | 2 | 3 |
| 2.6 There is insufficient training and education for accounting personnel toward the implementation of IFRS 13 | 9 | 70 | 3 | 3 | 5 |

**D3. Economic challenges in respect of fair value implementation facing SMEs in the agricultural sector in Ghana:**

| | | | | | |
|---|---|---|---|---|---|
| 3.1 A principle market does not exist and is not readily determinable | 15 | 33 | 21 | 6 | 15 |
| 3.2 It is not possible to market the agricultural produce before further processing | 3 | 15 | 18 | 24 | 30 |
| 3.3 The principle market is accessible only through middle traders or brokers | 21 | 27 | 21 | 12 | 9 |
| 3.4 There is a lack of market information on prices of biological assets | 21 | 53 | 5 | 5 | 6 |
| 3.5 There is no guaranteed market prices for farmers | 18 | 48 | 6 | 9 | 9 |
| 3.6 High inflation that erodes benefits of exchange rate gains from exports | 30 | 33 | 9 | 9 | 9 |
| 3.7 Frustration with the Ghanaian culture of not doing things according to schedule resulting in economic losses | 18 | 27 | 15 | 18 | 12 |
| 3.8 The pricing discovery process is not transparent | 14 | 55 | 0 | 13 | 8 |
| 3.9 The pricing discovery process is not understandable | 12 | 53 | 1 | 18 | 6 |
| 3.10 A market does not exist for the harvested produce | 6 | 15 | 27 | 30 | 12 |
| 3.11 A market does not exist for bearer biological assets (scrap market) | 12 | 20 | 9 | 35 | 14 |

**Appendix D – Summary of responses: Questionnaire to regulatory bodies**

**SECTION B: FAIR VALUE IMPLEMENTATION CHALLENGES**

**In the following questions rank your answer as follows:**
5 – Strongly agree; 4 – Agree; 3 – Undecided; 2 – Disagree; 1 – Strongly disagree

| | 5 | 4 | 3 | 2 | 1 |
|---|---|---|---|---|---|

**B1.    Knowledge of IFRS:**

| | | 5 | 4 | 3 | 2 | 1 |
|---|---|---|---|---|---|---|
| 1.1 | Preparers of financial statements in SMEs in the agricultural sector in Ghana have excellent knowledge of IFRS 13 | 3 | 4 | 0 | 18 | 5 |
| 1.2 | IFRS 13 is complex and thus too difficult to enforce at the SMEs level in the agricultural sector | 11 | 12 | 0 | 4 | 3 |
| 1.3 | Fair value implementation challenges have resulted in significantly better quality of financial reporting In Ghana | 3 | 9 | 9 | 3 | 6 |

**B2.    Level of accounting education and training in Ghana:**

| | | 5 | 4 | 3 | 2 | 1 |
|---|---|---|---|---|---|---|
| 2.1 | There is a shortage of educational institutions | 0 | 9 | 9 | 6 | 6 |
| 2.2 | There is limited access to training materials, seminars and workshops for working professionals | 3 | 9 | 9 | 6 | 3 |
| 2.3 | There is a low level of public awareness by regulators and other stakeholders on IFRS | 3 | 12 | 9 | 3 | 3 |
| 2.4 | Academic education does not focus on IFRS | 3 | 12 | 9 | 3 | 3 |
| 2.5 | Academic education does not focus on agricultural accounting | 6 | 19 | 2 | 2 | 1 |
| 2.6 | There is insufficient training and education for accounting personnel toward the implementation of IFRS 13 | 3 | 6 | 12 | 6 | 3 |

**B3.    Existing laws on the implementation of IFRS 13/IAS 41 in the agricultural sector in Ghana:**

| | | 5 | 4 | 3 | 2 | 1 |
|---|---|---|---|---|---|---|
| 3.1 | IFRS implementation costs are high | 3 | 17 | 1 | 6 | 3 |
| 3.2 | IFRS enforcement costs are high | 7 | 16 | 0 | 4 | 3 |
| 3.3 | Lack of adequately trained human resources makes enforcement difficult | 3 | 16 | 2 | 6 | 3 |
| 3.4 | Constant professional development is not well monitored | 9 | 3 | 3 | 9 | 6 |
| 3.5 | Absence of involvement of regulatory bodies makes enforcement difficult | 5 | 18 | 1 | 3 | 3 |
| 3.6 | High inflation that erodes benefits of exchange rate gains from exports | 6 | 11 | 2 | 8 | 3 |
| 3.7 | Frustration with the Ghanaian culture of not doing things according to schedule resulting in economic losses | 3 | 17 | 1 | 3 | 6 |

| 3.8 | There is a lack of methodical relationship between existing local laws and IFRS | 3 | 12 | 6 | 6 | 3 |
|-----|--------------------------------------------------------------------------------|----|----|---|---|---|
| 3.9 | There is a lack of methodical relationship between regulatory systems of the country (i.e. between government and other regulatory structures) | 12 | 11 | 2 | 2 | 3 |

## Appendix E - Research ethics clearance certificate

# UNISA | university of south africa

## COLLEGE OF ACCOUNTING SCIENCES
## RESEARCH ETHICS REVIEW COMMITTEE

Date: 29 February 2016

Ref: 2016_CAS_003

Name of applicant:

Mr JK Agyemang

Student/Staff #: 49919180

Dear Mr Agyemang

**Decision: Ethics Approval**

**Name:** Mr JK Agyemang,

49919180@mylife.unisa.ac.za

+233244502770

**Proposal:** Fair value accounting: challenges facing small and medium-sized entities in the agricultural sector in Ghana.

**Qualification:** Postgraduate student research

Thank you for the application for research ethics clearance by the College of Accounting Sciences Research Ethics Review Committee for the above mentioned research.   Final approval is granted for the completion of the research.

*For full approval: The application was reviewed in compliance with the Unisa Policy on Research Ethics by the College of Accounting Sciences Research Ethics Review Committee on 20 January 2016.*

*The proposed research may now commence with the proviso that:*
   1) *The researcher/s will ensure that the research project adheres to the values and principles expressed in the UNISA Policy on Research Ethics.*
   2) *Any adverse circumstance arising in the undertaking of the research project that is relevant to the ethicality of the study, as well as changes in the methodology, should be communicated in writing to the College of Accounting Sciences Research Ethics Review Committee .  An amended application could be requested if there are substantial changes from the existing proposal, especially if those changes affect any of the study-related risks for the research participants.*
   3) *The researcher will ensure that the research project adheres to any applicable*

> national legislation, professional codes of conduct, institutional guidelines and
> scientific standards relevant to the specific field of study.
>
> *Note:*
>
> *The reference number [top right corner of this communiqué] should be clearly indicated on all forms of communication [e.g. Webmail, E-mail messages, letters] with the intended research participants, as well as with the College of Accounting Sciences RERC.*

Kind regards,


Ms L Grebe

(Chairperson of CAS RERC)

grebel@unisa.ac.za

(012) 429 4994


Prof Elmarie Sadler

(Executive Dean of CAS)