

ST MARY UNIVERSITY, SCHOOL OF GRADUATE STUDIES

FACTORS AFFECTING SALES

PERFORMANCE OF CROP INSURANCE AT

ETHIOPIAN INSURANCE CORPORATION

BY

BINIAM SHIFERAW

ID. NO. SGS/0010/2006

JUNE 2015

ADDIS ABABA, ETHIOPIA

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List of Abbreviations

ANOVA	Analysis of Variance
CLRM	Classical Linear Regression Model
EIA	Ethiopian Investment Agency
EIC	Ethiopian Insurance Corporation
ЕТВ	Ethiopian Birr
GDP	Gross Domestic Product
	Information Communication
ICT	Technology
NBE	National Bank Of Ethiopia
SPSS	Statistical Package for Social Science
USD	United States Dollar
VIF	Variable Inflation Factor

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ABSTRACT

This study had examined factors within insurance institutional and personal framework that affect sales performance of crop insurance at Ethiopian Insurance Corporation. Primary data were collected using interview from the top management of the corporation to find out the factors behind the poor performance of crop insurance and then collected using questionnaires from 204 respondents consisting of the corporation's management staff and commercial farmers who were chosen using a combination of census, stratified and simple random methods. The data collected were carefully edited, coded, encoded using spreadsheet, and analyzed by using latest SPSS i.e. version 20. The results of the analyses revealed that awareness, accessibility and prompt service, professional activities by those selling insurance, premium and scope of policy cover were identified by the top management as key factors determining the sales performance of crop insurance. In accordance with existing empirical literature the results of the present study have supported the established relationship between sales performance of crop insurance and institutional and personal factors. The result of the regression analysis showed that the identified factors (Awareness, Accessibility & prompt service, Professionalism, Premium and Scope of cover) have significant relationship with sales performance of crop insurance. According to their respective magnitude, awareness level of commercial farmers have the strongest positive relationship and scope of policy cover have relatively lower positive impact on sales performance of crop insurance. Premium is the only factor with a negative relationship with the sales performance of crop insurance. With these findings, the study provides many implications to boost the sales performance of crop insurance. It shows that if these factors are taken in to consideration by EIC and other insurance companies, sales performance of crop insurance can be significantly improved.

Key Words; Crop insurance, Awareness, Accessibility & prompt service, Professionalism, Premium and Scope of cover.

CHAPTER ONE

INTRODUCTION

This chapter presents the Background of the Study, Statement of the Problem, Basic Research Questions, Objective of the study, Definitions of Terms, Significance of the Study, Scope of the Study and Structure of the Study.

1.1 Background of the Study

Agriculture remains an important economic sector in many developing countries. It is a source of growth and a potential source of investment opportunities for the private sector. Two-thirds of the world's agricultural value added is estimated to be created in developing countries (World Bank, 2008).

Ethiopia's economy is highly dependent on the agricultural sector, which provides direct livelihood for about83% of the population, contributing 43–45% of the country's Gross Domestic Product (GDP), 87% of its export earnings and around 73% of the raw material requirement of agro-based domestic industries (Araya, 2011). Above all, the agricultural sector is the prime source of food for the ever growing population of the country.

Regarding sectorial development, agriculture grew by 9%, industry 15% and services 12.5%. Consequently, agriculture and allied activities accounted for 41% of GDP, industry 13.4% and services 45.6%. Similarly, agriculture contributed 4.7%, industry 1.5% and service 5.3% points to the 11.4% real GDP growth in 2010/11 (Ethiopian Insurance Corporation, 2014).

In Ethiopia, 85% of the population lives in rural areas and depends on rain fed agriculture (Block, Strzepek, Rosegrant, & Diao, 2008). Although Ethiopia is affected by various natural disasters such as wild fire, wild animals and birds, grasshopper, "temch", drought is the most frequent and devastating. Moreover, studies indicate that climate change could result in more intense and prolonged droughts (IGAD & ICPAC, 2008). Flooding is also an increasing concern (Murendo, 2009). Natural disasters can reduce production, income,

investments, consumption, and food security. Coping mechanisms to reduce the impact of natural disasters can be ex-ante to smooth income in the presence of the threat of natural disasters and ex-post to smooth consumption after natural disasters actually occur. Income smoothing strategies, such as favoring traditional or drought-tolerant crops and plot diversification, not only may be limited in their ability to prevent income losses if the natural disaster occurs, but can also have high implied risk premiums, keeping households in poverty traps as they avoid investments that would otherwise increase their productive capacity (Derccon & Christiaensen, 2010).

The agricultural sector in Ethiopia is currently composed of 12.6 million smallholder farmers (who operate on farms averaging 1.2 hectares each) and several thousands of commercial farms. The combined annual crop production of these two groups of farms is 31 million tons, with 71% of this output comprised of grains(cereals, pulses, and oil crops) and the remainder consisting of vegetables, fruits, and cash crops (mainly coffee, sugarcane, chat, and enset). According to the latest GDP statistics, growth in the sector has been near 8% in recent years and in value terms the combined output of the agricultural sector is now worth an estimated Birr 221 billion (\$13 billion). (Access Capital, 2012)

Agricultural commercialization was not high on the policy agenda until recently, as Government rather prioritized ensuring food security and poverty reduction at household level.

Data from (Ethiopian Investment Agency, 2015) indicates that, there are about 10,139 registered commercial farmers of which 32% are in crop production, these investment projects have been registered between July 1992 and January 2015. Of those 3,148 crop production investments 344 are registered as operational. Overall distribution of commercial farmers varies from 1% in Gambella and Somali regional states to 31% in Tigray.

Ethiopia's insurance industry is relatively undeveloped which is exemplified by the sectors low penetration levels there are an estimated 0.3 Million formal insurance clients in Ethiopia. As per the data obtained from National Bank of Ethiopia (NBE), insurance premiums, including Life and General insurance, totaled ETB 4.8 Billion in the 2013/14 financial year (provisional) representing merely 0.2% of GDP.

According to (National Bank Of Ethiopia, 2015), Ethiopia has 17 insurance companies with a total of 273 branches throughout the country. There are also several new companies in the process of formation. Figures indicate that Ethiopia's insurance sector is skewed towards corporate clients who insure their assets (motor vehicle, buildings, warehouse, stocks and other properties), business (aviation, engineering) and insurance of the person (accident, health, workmen's compensation). General insurance dominates the sector (95%), with motor vehicle insurance forming the largest category of General insurance constituting 49% of total insurance premiums, with 88% of loss ratio. On the other hand, life insurance constituted merely 5% of total premiums.

The Ethiopian Insurance Corporation's (EIC), here in after called The Corporation, annual gross premium income is Birr 2.0 billion. The premium is lower than the projection as well as last year's same period performance by Birr 618.2 million or 23.8% and by Birr 183.4 million or 8.5% respectively. (Ethiopian Insurance Corporation, 2014)

Even though, Ethiopia's economy is highly dependent on the Agricultural Sector which provides direct livelihood for about83% of the population, contributing 43 - 45% of the country's Gross Domestic Product (GDP), 87% of its export earnings of which coffee and various crop have the upper portion, one can say, The Corporation is totally missing the huge opportunity from this sector, because, according to data from EIC, in 2014 budget year, out of the Birr 1.9 billion or 95% of the gross premium collected from the general insurance business, only Birr 14 million or 0.8% was collected from crop insurance class of business. And this poor performance was even worse during the last three years with aggregated premium of Birr 5.4 million for the three years.

This study, therefore attempted to determine the contributing factors that affect the poor sales performance of crop insurance within the corporation context.

1.2 Statement of the problem

The corporation, as a governmental institution, shall give due attention on supporting the agricultural development of the country since this sector still constitute a greater portion of country's GDP.

The government is taking initiatives on modernizing and commercializing the agricultural sector. The second Plan for Accelerated and Sustained Development to End Poverty (PASDEP) formulates a more pronounced strategy towards smallholder commercialization. Commercialization of agriculture and the growth of the non-farm private sector are two main thrusts of the initiative to accelerate growth for the strategic five years (2005/06-2009/10).PASDEP also recommends specialization both at farm and community level, a shift to high-value crops, promotion of niche high-value export crops, a stronger focus on selected high-potential areas, supporting the development of large-scale commercial agriculture where it is feasible, and facilitating the commercialization of agriculture, among others, through improved integration of farmers with markets - both local and global. Current government policy on commercialization focuses both on small and large farms. (Ministry of Finance and Economic Development, 2006).This strategy which revealed two broad paths for the commercialization of Ethiopian agriculture: commercialization via the emergence, growth and expansion of modern agricultural enterprises.

Considering the various risks attached to the agriculture such as wild fire, wild animals and birds, grasshopper, "temch", especially in drought prone area like Ethiopia, the government effort would be meaningless if there are no strong supports from the insurance industry to help farmers and/or investors cope up with the weather and associated risks involved in the business.

The corporation's effort to provide sufficient cover with reasonable premium is essential for the corporation to prove its commitment on being a development partner for the country and exploit the huge opportunity in the area.

EIC is currently providing its customers crop insurance policy, this insurance indemnifies the insured in respect of loss or damage to insured crop caused by direct physical damage or visible damage caused by the following perils, fire, lightning, flood, inundation, tempest, storm and hail. And mostly the insurance does not indemnify the insured against, loss or damage occurring directly or indirectly as a result of drought conditions, crop diseases and/or pests, loss of earnings, loss by delay, loss to crop outside the limits of the insured farm after harvest or in transit, loss to agricultural inputs and equipment stored in the insured's field. (Ethiopian Insurance Corporation, 2014)

And the premium the corporation currently charging for such cover is perceived to be the highest in the market.

Consequently, the corporation is currently facing a serious problem in the area of retaining existing customer and attracting new ones. To this effect most customers are retaining the risk by themselves and when its mandatory for them to have insurance because of some credit arrangement from banks, they transfer their insurance to private insurance companies. So the corporation's gross written premium on this class of business is very low over the years. This problem occurred through different reasons.

The study has tried to find out the major causes for the poor sales performance on the crop insurance and gave possible recommendation. Taking these fact into account and information gathered from interviews with the top management staffs of the corporation, the under mentioned problems are worth mentioning.

- 1. The majority of the employees and sales forces doesn't have detail awareness on the crop insurance, and this fact is keeping them from promoting the cover to customers.
- 2. Highly formalized policies and procedures are creating delayance on providing the cover and making the corporation very rigid on the scope of cover.
- 3. The corporation charges relatively a higher underwriting premium relative to other private insurance companies.
- 4. The limited human resource (agricultural experts) that are only available at the head office is creating unnecessary delayance to provide cover and most of the time even leads to losing the business
- 5. There are low level of awareness and knowledge regarding the use and importance of crop insurance between the commercial farmers, and these facts are keeping them from insuring their crop farms

So when we summarize the above mentioned problems, the researcher has come to understand that the major factors that affect the sales performance of crop insurance at the corporation can be categorized as follows;

• Accessibility and prompt service

Currently, The corporation have 6 District A's, 8 District B's and 52 branches across the country, but its few, to be exact only two, agricultural experts are only stationed at the head office situated in the capital city, Addis Ababa, and this fact is hindering the corporation to answer customer's request for crop insurance timely since those experts are found at Addis Ababa and also limited in numbers and because of the nature of the crop insurance demand, the request for the insurance usually arises at similar time of the year, mostly in the rainy season of the country. So it's very difficult to answer those questions from across different region of the country within the time frame of the customers need.

Professionalism

As of June 30, 2014, the total number of permanent employees has reached 1,224 all over the country, but because of its widely unsold nature of the policy, those staff members who directly meet with the customers don't have the necessary knowledge about the crop insurance, and this is keeping them from advocating and persuading the customers to buy the policy and also on creating the appropriate awareness in to the public.

• Scope of cover

Currently the corporation's crop insurance policy indemnifies the insured against loss or damage of insured crop caused by direct physical damage or visible damage caused by the following perils, fire, lightning, flood, inundation, tempest, storm and hail. And according to the data from the interviews, there are many requests from customers to the corporation to cover the losses or damages caused by drought, but because of reinsurer's rejection and/or fear of the risk, the corporation couldn't provide such cover. And this fact is contributing to the poor sales performance of crop insurance.

• Awareness of customers

As per the interview results, the level of awareness about crop insurance, the farmers and the public's knowledge about the use and importance of crop insurance and about what is and is not covered under the crop insurance policy is low. And this fact has huge impact on their decision of buying the policy.

• Premium

Even though most of the corporation's management convinced that the current premium the corporation charging is fair, in the customer's eye The corporation's premium to this policy is expensive relative to the private insurers in the country.

So far, studies on agricultural insurance in Ethiopia have focused on micro insurance. Little effort was made by the corporation to improve performance and determine factors that could influence crop insurance consumption. This explains why this study was concerned with identification of the key factors that inhibit sales performance of crop insurance. It was within this context that this study attempted to find out the factors that affect the sales performance of crop insurance at the corporation.

1.3 Basic Research Questions

This study was designed to provide answers to the following research questions:

- What is the socio-economic characteristic of crop insurance consumers?
- What is the status of crop insurance coverage in Ethiopia?
- What institutional and personal factors within insurance marketing framework do affect sales performance of crop insurance?
- What is the relationship between institutional and personal factors (accessibility and prompt service, professional activities of those selling insurance, scope of policy cover, awareness of customers and premium rate) on the one hand and sales performance of crop insurance on the other hand?
- In what way(s) can sales performance of crop insurance be improved in the corporation in particular and in the industry in general?

1.4 Objective of the study

The purpose of this study was to identify and examine those factors within insurance institutional and personal framework that affect sales performance of crop insurance at Ethiopian Insurance Corporation. The specific objectives include:

- To determine the socio-economic characteristics of crop insurance consumers in Ethiopia.
- To determine the status of crop insurance coverage in Ethiopia.

- To determine institutional and personal factors within insurance marketing framework that may affect sales performance of crop insurance.
- To analyze the relationship between and effect of or between the identified factors and sales performance of crop insurance.
- To explore avenues upon which a pulsating sales performance of crop insurance could be developed in the EIC as well as in Ethiopia.

1.5 Definition of Terms

- Claim "Is a request for payment under the terms of an insurance policy when a risk materialized.
- Customer "External customer who has purchased insurance products"
- **Insurance** "Is a device for transfer of risk of individual entitles to an insurer, who agrees, for a consideration (called the premium) to assume to a specified extent losses suffered by the insured"
- Insured "Person or people to whom payment will be made in the case of risk.
- General insurance: property insurance indemnifies property damage caused by an accidental occurrences and liability insurance indemnifies the insured party in the event that it is legally liable to pay compensation to a third party.
- **Pool**; a collection of similar risks gathered together as a risk spreading mechanism, so whenever one unfortunate suffers from a loss the whole pool will contribute for such loss.
- **Premium** a sum of money that has to be paid by the insured in order to transfer risks to the insurance corporation.
- **Risk** "Risk is the possibility of an unfavorable deviation from expectations. It is the possibility that something we do not want to happen will happen or that something we want to happen will fail to do so,"

(Ethiopian Insurance Corporation, n.d.)

1.6 Significance of the study

The study attempted to identify and examined the factors affecting the sales performance of crop insurance of the corporation. Therefore, the researcher believe that it would have the following significances:

- a) The study will create insights to the readers on the factors that affect sales performance of crop insurance business.
- b) The study will help the corporation to see where it stands from the customers' perspective and strategize itself in a better way to serve its potential customers.
- c) The study will help the management of the corporation see the major area that causing poor sales performance in crop insurance and make appropriate decision to encounter the problems.
- d) The study may initiate other researchers to undergo a detailed study on the subject and also in general insurance industry.

1.7 Scope of the Study

Though it's very important to cover the insurance industry as a whole, because of the limitation of resources like finance, availability of data and most importantly time, this study will only consider the case of the Ethiopian Insurance Corporation.

Even though the corporation faced many problems, it is too difficult to incorporate and discuss all the problems of the corporation in this study. Therefore considering the nature of sensitivity this research study is delimited to the problems that the corporation faces specifically in connection with its sales performance of crop insurance.

Since the study is undertaken within academic calendar and also limitation on finance, the researcher only took a sample of 210 respondents out of total population of 461.

1.8 Organization of the Study

The study is organized into five chapters. Chapter one is the introductory chapter that covers the Background of the study, statement of problem, basic research questions, objective, significance, scope and organization of the study and definition of terms.

Chapter two is review of relevant literature. Concepts and Theoretical Framework: sales performance, significance of the agricultural sector in economic development, and factors affecting sales performance of crop insurance.

Chapter three is the methodology section. It focuses on the research perspectives, population, sampling, research instruments, data collection, and data analysis.

Chapter four is presentation of data and analysis of results, findings and discussions. And finally Chapter five is the summary, conclusion, limitation and recommendation.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

This chapter provides a detail review of relevant literature on the determinant factors of sales performance of crop insurance as well as insurance consumption as a whole that will be used to justify the findings of the study later on. This chapter also covers brief historical overview of the Ethiopians insurance industry, Developments in Ethiopian insurance industry, the corporation's profile, Concepts, uses and benefits of insurance and finally the conceptual framework of the study.

2.1 Overview of Ethiopian Insurance Industry

2.1.1 Insurance in Ethiopia

The development of insurance business in Ethiopia was closely linked to expatriates and foreign insurance companies. These parties actively participated in the establishment of the first domestic insurance company in Ethiopia. (Hailu, 2007)

According to various sources, the emergence of modern insurance in Ethiopia is traced back to 1905 with the establishment of the first Ethiopian bank called Bank of Abyssinia. The bank which was established under a fifty years concession granted by Emperor Menilek II to the National Bank of Egypt in March 1905, and was inaugurated in February 1906. (Schaefer, 1992) According to some sources, Haile Michael Kumsa (1992:30); Society of Insurance Professionals (2004:6); and Belay Giday (1987:100), the bank had been acting as an agent for a foreign insurance company to underwrite fire and marine policies. (Ibid)

An Austrian called Weinsinger came to Ethiopia in 1923 to serve as an agent for a Swiss company called La Baloise Fire Insurance Company. Baloise paid the first fire loss on a warehouse and shop in 1929. (Ibid)

The first domestic insurance company called Imperial Insurance Company was established in 1951, and then until 1960 only one domestic and several foreign insurance companies represented by agents were undertaking insurance business mainly life, marine, fire and general accident insurances in Ethiopia. (Ibid)

In 1962, the Central Statistical Office conducted a survey of insurance companies operating in Ethiopia. The survey covered 34 companies in total, out of which, the two of them were domestic insurance companies (Imperial Insurance Company & National Ethiopian Insurance Company). In 1960 and 1961, the two domestic insurance companies undertook about 50% of the total life and Fire insurance business, less than one fifth of the motor insurance and small portion of the marine insurance business. These two companies were also reinsuring a substantial portion of their business abroad because of their relatively low capital base. (Central Statistical Office, 1963)

About 15 domestic insurance companies were established between the times 1951 to 1969. Except the Imperial Insurance Company, the other 14 companies were established between the times 1960 to 1969. However, they were not fully owned by Ethiopians, rather Foreigners had ownership interest and were participating in the board of management and company management positions. In most of the companies, appointed auditors and legal advisors were also foreigners. (Hailu, 2007)

The only insurance laws applicable to the Ethiopian insurance industry during the 1960s were insurance provisions under the Commercial and the Maritime Codes of 1960. In October 1970, The Government proclaimed the first insurance proclamation, Proclamation No. 281/70, to regulate and control the insurance industry of the country. Accordingly, a company was not allowed to undertake insurance business of any kind unless it was a domestic company and had a paid up capital of not less than Ethiopian Birr 400,000.00 to undertake general insurance and Birr 600,000.00 to undertake life insurance or Birr 1,000,000.00 to undertake both general and life insurance businesses. (Ibid)

Regarding share ownership, the government issued Legal Notice No. 393/71, dictating at least 51% of the shares and paid up capital of an insures transacting general insurance or composite insurance (general and life combined) business should be held by Ethiopian nationals or national companies at all times. The percentage in the case of life insurance business was 30%. (Ibid)

The 1974 revolution overthrew the Imperial regime and first the provisional military administration council then followed by the path of command economy with a socialist ideology, took over power in Ethiopia. Consequently, the then government nationalized all banks and insurance companies and put restrictions on the involvement of private sector in the economy by Proclamation No. 26/1975 known as "Government Ownership and Control of the Means of Production". In December 1975, the provisional government issued Proclamation No. 68/1975 to establish EIC, effective January 01, 1976 by nationalizing all the private insurance companies, so it monopolized the insurance industry. (Ibid)

Following the collapse of the Derg regime, the transitional government of Ethiopia issued another insurance proclamation, Proclamation 86/1994, which permitted the establishment of private insurance companies in the country. But restricted to domestic investors only. Following this EIC was re-established as public enterprise under the Council of Ministers Regulation No. 201/1994 with a paid-up capital of Birr 61,007,038. (Ibid)

Subsequent to the 1994 insurance proclamation, the private sector once again has gotten the chance to participate in the insurance business. The first private insurance company to be established in August 1994 was Universal Insurance, which was later closed as a result of some supervisory actions. Lion Insurance Company, which was established in October 1998, was merged with United Insurance Company in October 2000. This merger constituted as the first voluntary merger of insurance companies in the history of the Ethiopian insurance industry. (Ibid)

As per the data obtained from National Bank of Ethiopia (NBE), As of June 2014, there are 17 insurance companies operating in Ethiopia, one government owned and 16 private companies. With over 273 branches scattered throughout the country of which 129 or 47% are located in Addis Ababa. There are an estimated 0.3 Million formal insurance clients in Ethiopia. There are also several new companies in the process of formation. Figures indicates that Ethiopia's insurance sector is skewed towards corporate clients who insure their assets (motor vehicle, buildings, warehouse, stocks and other properties), business (aviation, engineering) and insurance of the person (accident, health, workmen's compensation). General insurance dominates the sector (95%), with motor vehicle insurance forming the largest category of General insurance – constituting 49% of total

insurance premiums, with 88% of loss ratio. On the other hand, life insurance constituted only 5% of total premiums. (National Bank Of Ethiopia, 2015)

During the year 2013/14, the total premium production of the industry amounts to Birr 4.8 Billion. Of which long term insurance constitutes Birr 288.6 Million (5%) and general insurance comprises Birr 4.5 Billion (95%). The insurance industry has registered an average growth of 27.1% during the past 3 years (2009-12), however due to the implementation of third party compulsory insurance proclamation, and the rise in the volume of imported items, the amount of premium in 2011/12 had shown an exceptional surge which resulted in a growth to the tune of 54.3 %. However, the growth rate has slowed down to only 19% during the year 2012/13 and expected to be lower or negative this year. According to NBE, as at march 2014, the industry's growth has shown a negative growth as compared to last year's performance. Accordingly, EIC's growth rate for the years covering (2009/10) was 25.3 % and its growth had reached 54.1% during the year 2011/12 almost similar to the industry's growth. Surprisingly, last year, the corporation had registered a growth rate of 32.1%, which is well above the industry's growth rate by 13.1%. However this year, the internal records have shown that the gross written premium registered by the corporation has shown a slight decrease of (8.5%). (Ethiopian Insurance Corporation, 2014)

The corporation's annual gross premium income is Birr 2.0 billion. The premium is lower than the projection as well as last year's same period performance by Birr 618.2 million or 23.8% and by Birr 183.4 million or 8.5 respectively. From the total gross premium of the period under review, Birr 1.9 billion or 95% has been generated from General insurance business and the rest amount of Birr 99.4 million or 5% is from life insurance policies. (Ibid) Even though, Ethiopia's economy is highly dependent on the Agricultural Sector which provides direct livelihood for about83% of the population, contributing 43 - 45% of the country's Gross Domestic Product (GDP), 87% of its export earnings of which coffee and various crop have the upper portion, one can say, The corporation is totally missing the huge opportunity from this sector, because, according to data from EIC, out of the Birr 1.9 billion or 95% of the gross premium collected from the general insurance business, only Birr 14 million or 0.8% is collected from crop insurance class of business. And this poor

performance was even worse during the last three years with aggregated premium of Birr 5.4 million for the three years.

The corporation was established in 1976 by proclamation No.68/1975. It came into existence by taking over all the assets and liabilities of the thirteen nationalized private insurance companies, with Birr 11 million (USD 1.29 million) paid up capital. After operating the business for about nineteen years under protected monopolistic system as state owned-sole insurer, EIC was re-established as public enterprise under proclamation number 201/94 with Birr 61 million (USD 7.13 million) paid up capital in consequence of the downfall of the Marxist regime in mid-1991. (Ethiopian Insurance Corporation, n.d.)

The vision of the corporation is to be a world class insurer by the year 2025.

Mission of the corporation is to provide its customers an efficient and reliable insurance service and engage in investment activities by deploying the right mix of expertise, the state of the art technology and cost effective strategy. In doing so, it contribute to the sustainable development of the national economy and play a vital role in the industry." (Ethiopian Insurance Corporation, n.d.)

2.2 Related literature

2.2.1 Insurance

"People seek security. A sense of security may be the next basic goal after food, clothing, and shelter. An individual with economic security is fairly certain that he can satisfy his needs (food, shelter, medical care, and so on) in the present and in the future. Economic risk (which we will refer to simply as risk) is the possibility of losing economic security". "Historically, economic risk was managed through informal agreements within a defined community. If someone's barn burned down and a herd of milking cows was destroyed, the community would pitch in to rebuild the barn and to provide the farmer with enough cows to replenish the milking stock. This cooperative (pooling) concept became formalized in the insurance industry. Under a formal insurance arrangement each insurance policy purchaser (policyholder) still implicitly pools his risk with all other policyholders" (Andersson, 2005).

It is good business management to protect the assets of your business (including the owners) against unforeseen events. This protection usually comes in the form of insurance.

"Insurance is simply a devise whereby many people contribute to a pool, so that a few who suffer a loss may be compensated" (Sabiyam, 2005).

It is a promise of reimbursement in the case of loss; paid to people or companies so concerned about hazards that they have made prepayments to an insurance company. "An insurance policy may be broadly defined as a contract under which the insurer agrees, in return for a premium, to indemnify the insured for loss suffered as a result of the occurrence of specified events which cause the destruction, loss or injury of something in which the insured has an interest" (Nkrumah-Arkoh, 2012)

In law and economics, insurance is a form of risk management primarily used to hedge against the risk of a contingent uncertain loss. Insurance is defined as the equitable transfer of the risk of a loss from one entity to another in exchange for payment. "Insurance, unlike most financial products, is characterized by the reversal of the production cycle insofar as premiums are collected when the contract is entered into and claims and costs arise only if a specified event occurs". (International Association of Insurance Supervisors, 2003)

Normally, only a small percentage of policyholders suffer losses. Their losses are paid out of the premiums collected from the pool of policyholders. Thus, the entire pool compensates the unfortunate few. Each policyholder exchanges an unknown loss for the payment of a known loss called premium (Andersson, 2005)

2.2.2 Benefits of Insurance

Insurance, like most institution presents society with various benefits. Peace of mind, indemnification, keeps families and business together, provides a basis for credit, stimulate savings and provides investment capital are the most important general benefits of insurance. (Dickson W. M. G, 1999)

Peace of mind: Almost everyone has a basic desire for some security or peace of mind. To the extent that insurance provides certainty or predictability, it helps an individual or business improving efficiency of actions by reducing anxieties.

Indemnification: The direct advantage of insurance is indemnification for unexpected loss, which means, putting one to the same position he/she was before the unfortunate events occurred.

Keep families and business together: The existence of insurance often supplies financial aid at time of death of family or damage of property due to unforeseen events.

Provides a basis for credit: One finds it impossible to visualize the credit economy of today without insurance. For instance, fire insurance is invariably used by mortgages who loan money with real or personal property as collateral. Banks wouldn't dare to grant any loans without making sure there is some institution or someone that will pay them their money if the unfortunate happens to the collateral they hold against the credit granted.

Stimulates savings: classes like life insurance have special advantages in stimulating savings.

Provides investment capital: Insurance premiums normally are paid in advance of losses and held by insurers until the time of claim payment, which allows insurers to invest it.

2.2.3 Principles and Practice of Insurance

The primary purpose of insurance is to act as a risk transfer mechanism. That is, insurance is a mechanism, which takes up on itself the risk of others. It does so by asking for a contribution, a premium, from each person seeking protection and then hold this money, investing it wisely, until some has to be paid to the few unfortunate enough to become victims of undesired events. Thus, insurance companies gather the people who want insurance protection and set it up to operate a common pool. The pool idea can work because different members of the pool present different hazards to the pool itself, and there must be some balance between how much a person puts in and how much it is likely the pool will have to pay that person in the case of unfortunate events. However, there must be some limits on the availability of such risk transfer mechanism. For example, it would not be wise to let people benefit from their own intentional or criminal actions. This could happen if it was possible for a person to insure their neighbor's property and then would burn it down in order to collect the compensation from the insurance. Even when no criminal action were presented, it doesn't not seem proper for a person to benefit from a fire at neighbor's property where he himself had no financial interest at all in the property or to benefit from loss who the insured intentionally destroyed it in the first place. (Dickson W. M. G. 1999)

It is therefore, necessary to have some idea of what can and cannot be insured. However, the world of business is not static, it changes through time, what may be uninsurable today could be insurable tomorrow. (Ibid)

Currently insurable risks must satisfy the followings;

Insurable interest: there should be a legally recognizable relationship between the insured and the subject matter of insurance

Financial value: The subject matter insured must have or capable of being measured in terms of money.

Fortuitous: The event to be insured must be fortuitous as far as the insured concerned, it is not possible to insure against events that will definitely occur.

Pure risk: The event that is to be insured must only have unfavorable outcomes. Or speculative risks cannot be insured since there is a chance or gain or loss.

2.2.4 Crop Insurance

Crop insurance indemnifies the insured in respect of loss or damage to insured crop caused by direct physical damage or visible damage caused by the following perils, fire, lightning, flood, inundation, tempest, storm and hail. And mostly the insurance does not indemnify the insured against, loss or damage occurring directly or indirectly as a result of drought conditions, crop diseases and/or pests, loss of earnings, loss by delay, loss to crop outside the limits of the insured farm after harvest or in transit, loss to agricultural inputs and equipment stored in the insured's field. (Ethiopian Insurance Corporation, 2014)

Crop insurance complements other instruments aimed at stabilizing producer incomes. Governments have traditionally put heavy emphasis on managing agricultural outputs and input markets as a means of stabilizing producers' income, through marketing boards, quotas, price support mechanism, input subsidies, and other mechanisms. Governments perceive agricultural insurance as supplementing these traditional means by addressing production risks. With very few exceptions (such as agricultural revenue insurance products available in the United States), agricultural insurance does not cover price volatility. Overall, government sponsored multi-peril crop insurance programs have been disappointing. Limited insurance penetration despite high premium subsidies, consistent underestimation of the catastrophic risks involved in agriculture, poor financial performance, with claims and administrative costs exceeding premiums, inappropriate pricing, uncontrolled moral hazard, and adverse selection are among the key endemic problems underlying agricultural insurance programs worldwide, in both developed and developing countries. (Oliver & Charles, 2010)

2.3 Empirical Studies of Factors Affecting the Performance of Crop Insurance

Just like the others general insurance policies, crop insurance is based on the principle of large number. The risk is distributed across space and time. The losses suffered by farmers in a particular locality are borne by farmers in other areas or the reserves accumulated through premiums in good years can be used to pay the indemnities. Thus, a good crop insurance program combines both self as well as mutual help principle. Crop insurance brings in security and stability in farm income. Crop insurance protects farmers' investment in crop production and thus improves their risk bearing capacity. Crop insurance facilitates adoption of improved technologies, encourages higher investment resulting in higher agricultural production. A properly designed and implemented crop insurance program will protect the numerous vulnerable small and marginal farmers from hardship, bring in stability in the farm incomes and increase the farm production (Bhende, 2002)

The farmer is likely to allocate resources in profit maximizing way if he is sure that he will be compensated when his income is catastrophically low for reasons beyond his control. A farmer may grow more profitable crops even though they are risky. Similarly, farmer may adopt improved but uncertain technology when he is assured of compensation in case of failure. This will increase value added from agriculture, and income of the farm family. (Hazell, 1992)

In previous empirical studies, the performance of crop insurance was viewed as a function of different variables; the followings are some key studies which are relevant to this study.

2.3.1 Accessibility and Prompt Service

In 2014 G/Mariam Kebede attempts to find out factors behind customer dissatisfaction that eventually leads to loss of customers, and delayance on service delivery was the main influencer for such thing. And the reasons for the delayance on service delivery was insufficient manpower and too much workload on the employees, ability and competency of the employees and the management has been bottleneck in the service delivery process and must be upgraded and updated, and finally the researcher recommended that insurance companies should have the optimum level of expertise that considers the volume of work and also give great deal of emphasis on the development of their human resources. (G/Mariam, 2014)

2.3.2 Awareness

Ebitu, Ibok & Mbum (2012) on their study, examined factors within insurance institutional framework that affect insurance consumption in Akwa Ibom State in Nigeria. Primary data were collected from 80 insurance consumers judgmentally drawn from 10 insurance companies located in the state. Data were collected on: accessibility and prompt payment of claims, knowledge of the use and importance of insurance, professional activities by those selling insurance, nature of insurance policy statement and the overall corporate image. And finally the researcher have come to the following findings and conclusions; the first identified factor affecting insurance consumption was access and prompt payment of claims was positively related and statistically significant at 1% level of probability which showed that accessibility of insurance companies and prompt payment of genuine claims was a determinant of amount of insurance bought by the consumers and generally insurance consumption and patronage is a function of insurance location and the company's ability to pay genuine claims as at when due. The second factor was knowledge of the importance of insurance and general awareness created by insurance companies, and it was found to be positively related with insurance consumption and was statistically significant at 5% probability level and to this effect the researchers conclude that insufficient knowledge, awareness and publicity campaign hinders insurance consumption. The third factor was professionalism, and concluded it was statistically significant and had positive contribution to insurance patronage. This however showed that activities of insurance marketers did

influence insurance consumption and patronage. And opinions were, insurance practice calls for a high degree of professionalism, the absence of which has been the curse of the insurance industry.

Rabindra Kedar Nepal in 2012 studied insurance market in Nepal and came up with the following conclusions, Poor educational background; high poverty level and political instability are the key factors that have played a significant role in denying more participation in insurance sectors. On the other hand, due to rapid advancement in information sectors, people's awareness towards insurance has been more knowledgeable about the importance and the benefits that insurance provides in their personal and professional life. (Rabindra, 2012)

(Geoffroy, Fabian, & Felice, 2012) On their study, they pin point the reason for the crop insurance growth's failures are usually found in either supply or demand conditions. On the supply side, the most explored issue is the insurers charge higher or expensive premium. The obvious reasons for such act are asymmetric and incomplete information with the resulting problems of adverse selection, moral hazard and systemic risk. And especially due to the systemic character of yield risks, reinsurance becomes very expensive. Without government subsidies or public reinsurance, insurers pass this high cost to the farmers' premiums. On the demand side, the awareness of farmers on the benefits and importance of agricultural insurance is very low. And this thing is often cited as one possible reason for limited demand.

(Behrooz, Esa, & Saadat, 2013) On their study, Factors Influencing Crop Insurance Demand, they have come to understand the fact that, there is a positive relationship between the farmer's awareness of the rate of premium and the consumption of crop insurance. The positive and significant effect on the farmers' awareness of the insurance rate is the indicator of the fact that farmers with the awareness of the premium rate select the product desired to them. According to the researchers, there is a positive relationship between the training and promoting courses and the tendency of farmers to the consumption of crop insurance.

Generally, There are consistent findings and conclusions made across the above studies regarding how awareness affect the performance of crop insurance as well as insurance consumption in general. Which is, insurers should increase the level of awareness on the use and benefits of crop insurance as well as insurance in general to increase the consumption.

2.3.3 Premium

A study on Agricultural Insurance, came to conclusion that, Insurance and other risk transfer solutions can be part of a systematic adaptation approach and can enable vulnerable countries to better manage the new climate risks. Insurance can provide financial security against the economic impacts of extreme climate events and may for some climate change perils, be more cost effective than certain prevention measures. The combination of risk transfer and prevention adaptation measures is a subjective change that depends on policy preferences, investment choices and opportunity costs. There are three mechanisms by which insurance can be an important component of adaption. The first is by directly transferring the risks away from the vulnerable allowing people to use insurance payouts to recover from shocks and maintain their livelihoods. The second is by allowing them to take productive risks (e.g. to take or make a loan, to invest in their own productive capacity and to develop economically). The poor are almost always the most exposed to climate impacts. They are more likely to escape poverty if they are able to better protect themselves. The third mechanism is through the signals provided by insurance pricing insurance sets a price tag on risks. If certain activities become riskier under a changing climate the insurance price (premium) will rise to reflect this risk. The premium increase can incentivize change to less risks activities. (F. N. Nnadi, et al., 2013)

Individuals cannot influence the nature and occurrence of the risky event. The insurance agency has fairly good but generalized information about the insurer. However, this does not hold true in the case of agriculture or crop insurance. Unlike most other insurance situations, the incidence of crop risk is not independently or randomly distributed among the insured. Good or bad weather may affect the entire population in the area. Lack of data on yield levels as well as risk position of the individual farmer puts the insurance companies in tight spot. As in the case of general insurance, agricultural insurance market also faces the problem of adverse selection and moral hazard. The higher premium rates discourage majority participation and only high risk clients participate leading to adverse

selection. Moreover, in crop insurance the individuals do not have control over the event, but depending on terms of contract, the individuals can affect the amount of indemnity. Tendency of moral hazard tempts an insured individual to take less care in preventing the loss than an uninsured counterpart when expected indemnity payments exceed the value of efforts. The imperfect information (gathering information is costly) discourages participation of private agencies in crop insurance market. Similarly, incidence of random events may not be independent. Natural disasters may severely damage crops over a very large area and the domain of insurance on which it is based crumbles down i.e., working of the law of large number on which premium and indemnity calculations are based breaks down. The private insurance companies of regional nature will go bankrupt while paying indemnity claims unless it spread risk over space. (S.S. Raju & Ramesh, 2008)

Limited success in crop insurance schemes is credited to the financial non-viability due to non–actuarial based premium, normally high, as well as the serious problem of moral hazard, adverse selection and complex administrative procedures. (Debdatta & Tamojit, 2010)

Timothy & Richards (2000) published a paper titled "A Two-Stage Model of the Demand for Specialty Crop Insurance". The researchers focused on modification of the Federal Multiple-Peril Crop Insurance Program for crops which have high cost for catastrophic level coverage and which would significantly reduce program participation. Three scenarios of insurance coverage (50, 65 and 75%) were examined by using aggregate data from grape production in 11 California counties from 1986-1996. And according to the results, the price-elasticity of demand for 50% coverage is elastic. Which means an increase in premium reduces much more consumption of agricultural insurance in a higher percentage change than that of the percentage change of the premium. And the researchers also suggest that insurance companies would benefit from increased knowledge and awareness of farmers about the insurance.

Concluding from the above studies, premium affects the performance of crop insurance in negative way. The higher premium on this type of insurance discourage farmers not to participate widely.

2.3.4 Professionalism

Fatima & Maira (2007) in their study, they suggest that in order for the insurance companies to get new as well as retain existing customers, they should offer competitive prices. Furthermore, a customer-orientation with focus on each customer as an individual is essential. This individual focus would allow insurance companies to build trust-based, long-term relationships with potential as well as existing customers and enhance their ability of providing individually adjusted services. Additionally, insurance companies need to work on building a reputation of integrity in order to eliminate skepticism and a feeling of mistrust. This again, would be possible through a trust-based relationship strategy in all contacts with the customers. The insurance companies should their professionals well informed and up to date about the policies they sell to be more of informative to their customers while selling the policies since the insurance companies fight for the same customers, establishing an informative, honest, and open relationship with potential customers would allow a seed of trust to be planted with them. In the long run, trust and integrity along with good prices would allow better chances to keep loyal customers than acquiring them through hasty measures. This is due to the fact that existing theories as well as the findings in our study show that insurance customers are likely to switch services and even companies if they receive better offers. Along with integrity, comes the issue of providing clarity in contracts and honest information to customers about their own responsibilities and circumstances in cases of an accident. Furthermore, information about conditions for the insurance and situations in which reimbursements will apply need to be made available to the customers at an early stage. Since all the respondents mentioned using the internet extensively, providing clear and complete information about insurances in an easily accessible way on company websites is a cost-effective means to keep the customers informed. However, it is equally important that there are competent personnel available to answer questions if customers call or visit.

A. G/Giorgis (2014) on her study of Assessing Factors Contribute to the Declining Rate of Life Insurance In The Corporation, came up with the conclusion that the major factors contributing to low level of performance are stated as follow; from the external factors low level of public awareness, unclear policy wordings and conditions, very poor marketing (promotion), no product developments, rigid scope of cover. And some of the internal

factors are; low level of awareness (knowledge) about the product between those who are selling the product (poor professionalism).

Low level of knowledge of the insurance products by those who are selling it, i.e. insurance professionals, is one major factor for the low performance of crop insurance and insurance in general.

2.3.5 Scope of Cover

Makki & Somwaru (2001) analyzed data from crop producer decisions over a five-year period from 1995 to 1999 and identified factors that influenced crop insurance choices. Their findings point out that risk level, price (premium), federal subsidization, expected indemnity payoffs, availability of alternative insurance products, and the characteristics of the contract itself affect crop insurance decisions to varying degrees.

Matthew & Aslihan (2006) in their study examined multiple factors farmers must consider when making crop insurance purchase decisions, their paper studied such factors through the use of a survey conducted in a 42 county region of Northern Illinois during 2005. Farmers (producers) were asked if the availability of a Premium Discount Plan affected their decision, Respondents indicated that the availability of a Premium Discount Plan influenced about 25% of the decisions made. Questions about the importance of ten specific purchase factors were also asked in two distinct groups of five factors each. In one group of factors, price of the insurance was found to be more important than the probability of receiving a claim payment. The other group of factors revealed that government subsidization of premium and weather concerns were highly important to survey participants. Results have also been summarized according to the risk attitude of respondents. Crop insurance participation, plan and coverage level, and other demographic data were among the contributing factors that affect the farmer's purchase decision on crop insurance.

2.4 Conceptual Framework of the Study

The following diagram shows the variables included in the study and the conceptualization of the relationship between the independent and dependent variables based on the interview findings held with the top management of the corporation.



Figure 1. Conceptual Framework of the study
CHAPTER THREE

REASEARCH DESIGN AND METHODOLOGY

This chapter presents the methodological concerns used in conducting this study and provides a justification for each step taken. It involves the Research Design, Data Sources and Data Collection Methods, Population and Sampling Techniques, Data Collection Procedures and Standardization of Data Gathering Tools and The techniques used to undertake the analysis.

3.1 Research design

According to purpose, research could be broadly divided into descriptive, exploratory and explanatory (Mark, Philip, & Adrian, 2009).

An explanatory research tries to establish relationship that exists between variables. It aims at identifying how one variable affects the other; it seeks to provide an empirical explanation to the causes and effects relationship between one or more variables (Mark, Philip, & Adrian, 2009). They are also used when the purpose of the study is to answer 'why' in a given context.

Research may also be exploratory where a study is conducted to explore and find out what is happening or to seek new insights about a phenomenon in a new light" (Robson, 2002 in (Mark, Philip, & Adrian, 2009). Mostly, it is used when a researcher wants to have a deeper understanding of a situation or a problem, or where the area of study is so new or vague that it becomes critically important to examine unknown variable that may affect a particular phenomenon. It, therefore, involves the use of methods like searching for library materials, asking for expert's opinion, and conducting a focus group.

Since the purpose of this study was to identify the factors behind the poor performance of crop insurance, and analyze their relationship with sales performance of crop insurance, the study employed a mixed method specifically a sequential exploratory method. For the exploratory part, using qualitative methods, semi-structured interview to be exact, to help the researcher get insights of factors that are affecting the sales performance of crop insurance then, for the explanatory part, used structured questionnaires to collect explanatory data and analyze the cause and effect relationship between the earlier identified factors to sales performance of crop insurance.

This strategy gave the researcher confidence that the study addressed the most important problems.

And as far as time horizon was concerned this study was typically a cross-sectional study in that data was collected from a cross section of commercial farmers and management staff of the corporation once and not for different periods of time.

3.2 Data Sources and Data Collection Methods

Both qualitative and quantitative data was collected using different methods of data collection such as semi structured interview and questionnaires. Both primary and secondary data was also used. The primary data was obtained from the management of the corporation and commercial farmers regarding factors that affect the sales performance of crop insurance using self-developed semi-structured interview and questionnaires. The secondary data was collected from the corporation, the National Bank of Ethiopia, the Ethiopian Investment Agency and the internet.

3.3 Population and Sampling Technique

3.3.1 Target Population

Target population means the total number of entities in which the researcher is interested in, it could be the collection of individuals, objects or events about which the researcher wants to make inferences.

Finally the target population for the exploratory study was the top management of the corporation that are in the ISP since they are the one with vast practical experiences and could see the big picture clearly. According to EIC's Human Resource Directorate, they accounted for only 9.

The target population for the explanatory part has been broadly categorized under two major groups,

- First, External population consisting of commercial farmers specialized on crop production, only those that are operational. According to data from Ethiopian Investment Agency, which amount to 344.
- Second, Internal population consisting of different levels of Managements only working in the corporation's Insurance Service Process, because they are the one with a non-stop interaction with customers and several years of practical experience of the situation.

According to data from the corporation's Human Resource Directorate, which amount to 117 Management staff.

So the total population of the explanatory part was accounted for 461.

3.3.2 Sampling Techniques

The technique for the exploratory part which was collecting qualitative data, the researcher used census from the target population, the corporation top management staffs only, since they are the one with extensive practical experience, know the real problem, and could see the big picture out there.

On the explanatory part, since the population under study is heterogeneous depending on the various characteristics of the interested parties involved, it would be appropriate to make the population homogenous by using stratified sampling method. By doing so the difficulties of gaining appropriate information were minimized. When collecting quantitative data, the researcher used simple random sampling techniques.

- * For the internal population, using the internal email system, outlook, the researcher distributed the questionnaires to those management staffs that were selected using simple lottery method.
- * For the external population, the researcher with the help of insurance professionals found on the outlying branches of the corporation, randomly distribute to those commercial farmers came to the offices at the time of data collection.

3.3.3 Sampling Size

Here the size differs between the two stages;

- I. Exploratory stage- considering the size of the population limited to only the top management staffs of the corporation involved in the Insurance Service Process, 9 respondents to be exact, the researcher took census.
- II. Explanatory stage- since the point of collecting quantitative data is to measure the relationship and their strength of the factors and the outcome. The researcher defined its sample from the total number of the population from both cluster using the formula detailed under then allocate the number of sample from each cluster equally as follow.

For populations that are large, (Cochran, 1963) developed the following equation to yield a representative sample for proportions. $no = Z^2 pq$

$$e^2$$

Which is valid where n_o , is the sample size, Z^2 is the 1-a equals the desired confidence level, which is 95%, e is the desired level of precision, p the estimated proportion of an attribute that present in the population, and q is 1- p. the value of Z is found in statistical tables. So for the purpose of this study the researcher formulated a sample size assuming p is 0.5(maximum variability), 95% of confidence level and +/- 5% precision, the sample size would have been 385. But since the population of this study was simple the researcher further calculated it with the following formula

Where, n_0 is the sample size which is 385 units and N is the population size which is 461. Having said all the above things, the sample size for the second phase is 210 units of sample. Then, to perform a regression analysis it's mandatory that the number of observation of all variables must be equal. So the researcher took 105 commercial farmers and 105 management staffs of the corporation.

3.4 Data Collection Procedures and Standardization of Data

Gathering Tools

In this study there were two stages of data collection in collecting primary data.

- a. In the exploratory stage, Semi-structured interviews can be very helpful to 'find out what is happening and to seek new insights' (Robson 2002:59 in (Mark, Philip, & Adrian, 2009)
 Since the researcher's purpose was to identify the factors that affect sales performance of crop insurance, the researcher used semi-structured interviews with the top management of the corporation. And also used some note pads to gather the information.
- **b.** In the explanatory stage, Questionnaires tend to be used for descriptive or explanatory research. (Mark, Philip, & Adrian, 2009),

So in the Second stage, after identifying the factors via the first phase the researcher developed structured questionnaire and collect quantitative data. The questions were framed using Likert's scale of measurement ranging from strongly agree with 5 points to strongly

disagree with 1 point. Questions eliciting information on respondents' socio-economic characteristics were also asked.

The semi-structured interviews was administered to the respondents through personal contact by the researcher & the structured questionnaire was administered with the help of the corporation's insurance professional that are found in the corporation's outlying branches across the country.

As far as secondary data is concerned, they were collected from the under listed sources.

- ⇒ The EIC's website *www.eic.net.et*
- ⇒ The National Bank's website *www.nbe.gov.et*
- ⇒ Different magazines, reports and documentations issued by NBE, EIC, EIA and various links from the internet.

First, permission of the consent of respondents was assured from themselves and the corporation with the help of the consent form that was also included the purpose, assured anonymity and confidentiality of responses.

3.5 Validity and Reliability

Before administering the interview and questionnaire, it was face validated with the advisor of the researcher.

To test for internal consistency of the research instrument, the researcher distributed the questionnaires to 30 respondents as a pilot test to test the fitness of the instrument to measure the sales performance of crop insurance.

Accordingly, the widely used method by many scholars is Cronbach's alpha. Cronbach's alpha reflects that the extent to which the items in questionnaire are related to each other. The values of Cronbach's coefficient alpha normally range between 0-1 values, which indicate the higher the values the higher degree of internal consistency. Although, different author accept different values of this tests to reach on internal reliability of the instrument, the most commonly accepted value is equal to or greater than 0.70 to reach on reliability of acceptable instrument (NUNALLY, 1978). Provided an overall Cronbach's alpha

Reliability Statisti	Reliability Statistics				
	Cronbach's	N of			
Variables	Alpha	Items			
Sales Performance	0.934	4			
Awareness	0.923	4			
Accessibility & Prompt Service	0.855	3			
Professionalism	0.846	4			
Premium	0.833	4			
Scope of Policy Cover	0.916	3			
Overall	0.858	22			

coefficient result of **0.858**, the questionnaire distributed under the study was considered reliable.

Table 1. Reliability test

3.6 Data analysis techniques

The study has used both qualitative and quantitative data analysis techniques. To analyze the data gathered from the semi-structured interview, the researcher has applied frequency tables to easily understand the major factors that affect the sales performance of crop insurance.

The second step was analyzing the descriptive and inferential statistics for the data collected using questionnaire. Here, the study used the statistical package for social science (SPSS) version 20.0 and presented the information gathered in useful way like frequencies distribution for the descriptive statistics and multiple linear regression model to understand and examine the causal relationship of the identified variables and sales performance of crop insurance.

The multiple regression model framework of the study is

$Sls = \alpha + \beta 1Awr + \beta 2APS + \beta 3Prf + \beta 4Prm + \beta 5Scp + Ui$

Where; **Sls** = Sales performance of crop insurance

 α = The constant, or Y intercept

 βi = The coefficient of the independent variables

Awr=The awareness level of commercial farmers

- **Aps** = Accessibility and prompt service
- **Prf** = Professionalism
- **Prm =**Premium
- **Scp** = Scope of policy cover
- **Ui** = the error term

CHAPTER FOUR RESULTS AND DISCUSSION

In this chapter, results have been presented and discussed to address the research questions and objectives. The following are the main headings: Response rates, Respondents' characteristics, Assumptions, results of the regression analysis and discussion of results.

4.1 Results

4.2.1 Response Rate

Out of the nine pre-thought interviews with the top management, the researcher was lucky enough to undertake all. So the response rate for the first phase data collection was 100%. For the second phase data collection, the researcher distributed 210 questionnaires with the help of insurance professionals across the country half to the external sampled population, commercial farmers, half to the internal sampled population, the corporations' management staffs, and out of the 210 questionnaires the researcher collected back 205, so the response rate is about 98%.



Figure2. Response rate of questionnaires

4.2.2 Respondents' Demographics

The study used two types of questionnaires for sampled respondents that are grouped in to two parts or stratum.

• The first group, the management of the corporation's demographic summary is presented as follow.

The first part of the questionnaire consists of three questions requesting about the age, work experience and educational level of the respondents. This demographic information of the respondents was not used to understand their relationship with the dependent variable which is sales performance of crop insurance rather they are just used to understand the composition of the management staff of the corporation as it is.

Age of the Corporation's management staff				
		Frequency	Percent	
Age category	24-29	22	18.8	
	30-35	41	35	
	36-40	21	17.9	
	Above	18	15 <i>A</i>	
	40	10	15.4	
	Total	102	87.2	

 Table 2. Age of The Corporation's management staff

Source; Own survey, 2015

The above table shows that about 35% of the management staff respondents were between the ages of 30 to 35, 18.8% were found in between 24 to 29, 17.9% were between the age of 36-40 and 15.4% of them were found at the age of above 40.

From the above figures one can conclude that the sampled management of the corporation has somehow fair age distribution.

The Corporation's m	nanagement staff	
	Frequency	Percent
1 st	92	90.19
degree		
Master's	10	9.81
degree		
Total	102	100.00
	The Corporation's n 1 st degree Master's degree Total	The Corporation's management staff Frequency 1 st 92 degree 92 Master's 10 degree 10 Total 102

Table 3. Educational level of the Corporation's management staff

Source; Own survey, 2015

Table 2 shows that almost 90% of the corporation's management staffs are a first degree holder and only 10% of them are master's degree holders.

	Experience in years		
		Frequency	Percent
Experience in years	Below	7	7%
	5		
	5-10	50	49%
	11-15	25	25%
	Above	20	20%
	15		
	Total	102	100%

Table 4 Experience in years

Source; Own survey, 2015

The above table demonstrates that 7% of the management staff of the corporation have less than five years experiences, 49% of them have five to ten years experiences, 25% of them have eleven to fifteen years of experiences and the other 20% have more than 15 years of experiences. So in this regard one can simple understand the corporation's management staff equipped with extensive work experience in the field.

• The second group, i.e. the commercial farmers, demographic summary is presented as follow. The first part of the questionnaire consists of ten questions that were designed to understand the socio-economic demographic characteristics' of the respondents, to have some understanding about the status of commercial farmers especially in crop production and the status of crop insurance coverage in the country,

	Ag	e	
		Frequency	Percentage
Years	30-35	30	29%
_	36-40	37	36%
_	Above 40	35	34%
	Total	102	100%
	Experi	ience	
		Frequency	Percentage
Years	Below 5	8	8%
_	5-10	16	16%
_	11-15	39	38%
_	Above 15	39	38%
	Total	102	100%
	Educa	tion	
		Frequency	Percentage
Stages	Literate (Read & Write only)	17	17%
_	Attended primary school	20	20%
_	Attended high school	12	12%
_	Diploma	26	25%
	1st degree	27	26%
	Total	102	100%

The table below showed the above mentioned information of the respondents as follow.

Table 5. Social Demographic Information of Commercial farmers

As one can understand from the above table, almost 70% of the respondents fall under the categories above 36 years of age, which means the majority of commercial farmers are matured. When we came to Experience, it also shows that the majority of respondents are well experienced with their field.

Educational achievement, only 51% of them have attended college education, the rest 49% of the farmers fall under the categories of high school, primary school and only read & write. These facts showed that Experience is more valued than education in this sector.

The following table depicted the economic demographics of commercial farmers. Regarding size of the land, only 4% of the respondents fall with holding of more than 750 hectares of land for their crop farm. The biggest share with 36% goes under the category of land holdings between 101 to 250 hectares. 25% of the farmers only holds a size of land below 100 hectares. From these figures, one can say the commercial farmers are yet to develop and involve themselves in to highly mechanize large farms.

The approximate capital investment figure also shows the same fact to that of size of land holdings, most of the farmers are still small in size with 33% of them fall under the category of investment between Birr 1 to 3 Million and 23% of them only invested below Birr 1,000,000.00.

From the data that shows about last year's crop insurance coverage, the figures depicted the fact that crop insurance coverage is very low, almost only 25% of them were insured last year, meaning the other 75% of the commercial farmers were not insured in the first place. Out of the total revenue collected by the commercial farmers which amounted about Birr 661 million, the amount insured was only amounted to about Birr 56 million which was very low.

The last year's production yield in quintal is also low, almost 40% of the farmers harvested quintals that amounted between 1,000 to 6,000, 18% even below one thousand. And only 1% of them collected more than 24 thousands of quintals. These facts can be attributed to the problems mentioned on the first chapter of the study, fear of risks.

The profit level of the farmers was also low. 57% of them only get a profit below Birr one million, 29% between 1 to 3 million, 12% between 3 to 5 million and only 1% accounts for a profit between 5 to 7 million and the rest one percent got a profit of more than Birr 7 million.

	Size of la	nd	
		Frequency	Percentage
Hectares	Below 100	26	25%
	From 100 to 250	37	36%
	From 251 to 500	23	23%
	From 501 to 750	12	12%
	Above 750	4	4%
	Total	102	100%
	Approximate Capi	tal Invested	
		Frequency	Percentage
Birr	Below 1,000,000.00	23	23%
	From 1,000,000.00 to 3,000,000.00	34	33%
	From 3,000,001.00 to 6,000,000.00	20	20%
	From 6,000,001.00 to 9,000,000.00	16	16%
	From 9,000,001.00 to 12,000,000.00	9	9%
	Total	102	100%
	Insurance Coverag	e Last Year	
		Frequency	Percentage
Birr	Below 1,000,000.00	7	7%
	From 1,000,000.00 to 2,000,000.00	9	9%
	From 2,000,001.00 to 4,000,000.00	6	6%
	From 4,000,001.00 to 6,000,000.00	2	2%
	From 6,000,001.00 to 8,000,000.00	1	1%
	Above 8,000,000.00	1	1%
	Sub-total	26	25%
Missing	No Cover	76	75%
Total		102	100%
	Last Year's	Yield	
		Frequency	Percentage
Quintals	Below 1,000.00	18	18%
	From 1,000.00 to 6,000.00	41	40%
	From 6,001.00 to 12,000.00	17	17%
	From 12,001.00 to 18,000.00	20	20%
	From 18,001.00 to 24,000.00	5	5%
	Above 24,000.00	1	1%
	Total	102	100%
	Last Year's Tota	Revenue	
		Frequency	Percentage
Birr	Below 1,000,000.00	16	16%
	From 1,000,000.00 to 5,000,000.00	37	36%
	From 5,000,001.00 to 10,000,000.00	25	25%
	From 10,000,001.00 to 15,000,000.00	13	13%
	From 15,000,001.00 to 20,000,000.00	9	9%
	Above 20,000,000.00	2	2%
	Total	102	100%
	Last Year's l	Profit	
		Frequency	Percentage
Birr	Below 1,000,000.00	58	57%
	From 1,000,000.00 to 3,000,000.00	30	29%
	From 3,000,001.00 to 5,000,000.00	12	12%
	From 5,000,001.00 to 7,000,000.00	1	1%
	Above 7,000,000.00	1	1%
	Total	102	100%

Table 6. Economic demographics of Commercial farmers

4.2 Regression Analysis of Factors Affecting Sales Performance of

Crop Insurance

The study used a multiple linear regression model and examined the effects and magnitudes of the independent variables identified from the interview with the top management of the corporation on the sales performance of crop insurance in the corporation.

Before analyzing the data gathered by the questionnaires, the researcher has checked the necessary assumptions that have to fulfill in order to undertake analysis by multiple regression model.

4.2.1 Assumptions of Multiple Regression Model

Five tests for CLRM assumptions namely normality, linearity, homoscedasticity, multicolinearity and independence of residual are conducted and discussed as follows

1. Test for Normality of Data

Test for normality, its determining whether the data is well modeled by normal distribution or not. This test of normal distribution could be checked by graphical (histogram and dot plot) method of tests. The normality assumption assumes a critical role when a study is dealing with a small sample size, data less than 100 observation. (Gujarati, 2004)

Even though the normality assumption is not a treat since the observation or sample size of the study is large enough, more than 100 observations, the researcher tested it using normal probability plot (NPP). The decision rule is, if the fitted line in the NPP is approximately a straight line, one can conclude that the variables of interest are normally distributed. (Gujarati, 2004)



Normal P-P Plot of Regression Standardized Residual

Figure 3. Graphical test of Normality Assumption

Source; SPSS result of Normality, 2015

From the above figure, we can see that residuals of the model are approximately normally distributed, because a straight line seems to fit the data reasonably well.

2. Test for Linearity and Homoscedasticity

Multiple linear regression model assumes there is a linear relationship between the independent variables and the dependent variables. Homoscedasticity assumption means the range of variance for the dependent variable is uniform for all values of the independent variables.

Both assumptions can be checked by scatter plot diagram stated below.



Figure 4. Scatter plot diagram

Source; SPSS result, 2015

As we can see from the above diagram, both assumption are not serious threat to the study since ne can draw one straight line to approximate the observations for all independent variables against the dependent variable, sales, and also the variance between the upper and lower cases of the observations are reasonably similar.

3. Test for Multicollinearity

Another assumption that has to be meet to undertake multiple linear regression model is the assumption of multicollinearity. It's an indication for a linear relationship between the independent variables. (Gujarati, 2004)

Variable Inflation Factor (VIF) technique was used. The VIF is a measure of the reciprocal of the complement of the inter-correlation among the predictors: $/VIF=1/(1-r^2)/$

The decision rule is a variable with VIF value of greater than 10 indicates the possible existence of multicollinearity problem. Tolerance (TOL) defined as 1/VIF, It also used by many researchers to check on the degree of collinearity. The decision rule for Tolerance is a variable whose TOL value is less than 0.1 shows the possible existence of multicollinearity problem. (Gujarati, 2004)

	Collinearity Statistics		
Variables	Tolerance	VIF	
Awareness	.300	3.335	
Accessibility	.624	1.603	
Professionalism	.384	2.607	
Premium	.895	1.117	
Scope	.828	1.207	

Table 7. VIF values of predictors

Source; SPSS Results, 2015

The above table showed that VIF values for all variables became less than the tolerable value, i.e. 10. And Tolerance value of all variables also became above 0.1 which indicates that this model is free from multicollinearity problem between the dependent variables.

4. Test of Independent of Residuals

Multiple linear regression model assumes the residuals are independent of one another.

The Durbin-Watson statistic is used to test for the presence of serial correlation among the residuals. The value of the Durbin-Watson statistic ranges from 0 to 4. As a general rule, the residuals are not correlated if the Durbin-Watson statistic is approximately 2, and an acceptable range is 1.50 - 2.50

				Durbin-Watson	
					2.420
1 1 1	0	CT 1	1	CD 11 1	

Table 8. Test of Independence of Residuals

Source; SPSS Results, 2015

From the table above, we can also understand that the assumption of independence of residuals is meet.

Generally, the study discussed five major assumptions that must be fulfilled for one to analyze data using multiple linear regression model. So, since all the five assumptions were not violated, the researcher examined the data collected by the questionnaires using multiple regression model as follow.

4.2.2 Results of Regression Analysis

The model for the study that depicted factors that affect the sales performance of crop insurance at Ethiopian Insurance Corporation is;

$Sls = \alpha + \beta 1Awr + \beta 2APS + \beta 3Prf + \beta 4Prm + \beta 5Scp + Ui$

Where; Sls= Sales performance of crop insurance α = The constant, or Y intercept βi = The coefficient of the independent variables Awr = The level of awareness of commercial farmers Aps =Accessibility and prompt service Prf = Professionalism Prm = Premium Scp=Scope of policy cover U_i = the error term

The regression analysis was performed based on data collected from the corporation's management staff and commercial farmers that are specialized on crop production. It demonstrated the relationship between the factors affecting sales performance of crop insurance at Ethiopian Insurance Corporation. Tables below showed the regression output of the dependent variables and explanatory variables.

		ANOV	A ^a			
		Sum of		Mean		
Model		Squares	df	Square	F	Sig.
1	Regression	15.794	5	3.159	178.998	.000 ^b
	Residual	1.694	96	.018		
	Total	17.488	101			

a. Dependent Variable: Sales

b. Predictors: (Constant), Awareness, Accessibility, Professionalism, Premium, Scope

Table 9. ANOVA

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.950ª	.903	.898	.13284	2.420

Model Summary

a. Predictors: (Constant), Awareness, Accessibility, Professionalism, Premium, Scope

b. Dependent Variable: Sales

Table 10. Model Summary

Source; SPSS Result, 2015

The result in the ANOVA table confirmed the significance of the overall model by p- value of 0.000 which is below the alpha level, i.e. 0.05, which means, the independent variables taken together have statistically significant relationship with the dependent variable under study.

The other major result under the model summary table showed the R or coefficient of correlation of the model is 0.95 or 95% and Adjusted R-Square or coefficient of determination of the model is 0.898 or 89.8%.

The regression analysis was done using sales performance of the corporation as dependent variable and Awareness, Accessibility & prompt service, Professionalism, Premium and Scope of cover as independent variables. The following table depicted the analysis's result as follow;

		Unsta	andardized	Standardized		
		Coe	efficients	Coefficients		
			Std.			
Μ	odel	В	Error	Beta	Т	Sig.
1	(Constant)	2.017	.151		13.362	.000
	Awareness	.277	.028	.579	9.986	.000
	Accessibility	.154	.018	.349	8.683	.000
	Professionalism	.139	.035	.207	4.028	.000
	Premium	118	.018	223	-6.644	.000
	Scope	.078	.018	.155	4.440	.000

a. Dependent Variable: Sales

Table 11. Regression coefficients result

Source; SPSS Results, 2015

The above table shows that, all the independent variables have statistically significant relationship with the dependent variable since their p-value is below the alpha level which is 0.05. Considering the standardized beta coefficients, the strongest predictor of the dependent variable (sales performance of crop insurance) is Awareness with 0.579 value and Accessibility & prompt service, Professionalism, Premium and Scope of cover with a beta value of 0.349, 0.207, -0.223, 0.155 respectively. All the independent variables have positive relationship with the dependent variable except the variable premium which has a negative relationship with the dependent variable.

So from the above table the researcher drive the model as follows;

Sls= 2.017 + 0.277*Awr* + 0.154*APS* + 0.139*Prf* - 0.118*Prm* + 0.078*Scp*

4.3 Discussion

The first thing that must be discussed here should be the overall fitness of the model; this fact has been confirmed by different types of statistical results.

The first way is the ANOVA test that produced a P-value of 0.000 which is below the alpha level, i.e. 0.05. That means the overall independent variables have statistically significant relationship with that of the dependent variable, i.e. Sales performance of crop insurance.

The R (Coefficient of Correlation) which is simply measures the degree of (linear) association between the dependent variable and the independent variables jointly. It only measures degree of association or covariation between the two variables. (Gujarati, 2004) In this case the value of R which is 0.95 means, there is a very strong relationship between the independent variables as a whole and sales performance of crop insurance or this can also means that independent variables taken together and sales performance of crop insurance of crop insurance of the corporation vary together 95% of the time.

The last one is by checking the adjusted R square (Coefficient of Determination), can be defined as the proportion of the total variation or dispersion in the sales performance of crop insurance of the corporation (dependent variable) that explained by the variation in independent variables in the regression. (Gujarati, 2004) So with adjusted R Square value of 0.898, meaning, 89.8% of the variation in sales performance of crop insurance is explained by the linear relationship with all the independent variables. The corollary of this is that only 10.2% of the variation in sales performance off crop insurance is unexplained by the relationship or these percentages of change in sales performance of the crop insurance accounts for other variables not mentioned under this study. Thus when adjusted R square is high it means that the independent variables included in the study play an important part in affecting the dependent variable.

Generally speaking, the regression model developed under the study can be considered as a good fit or predictor of sales performance of crop insurance of the corporation.

The individual effects of the independent variables can be explained by their respective beta coefficients. As per the regression result table 4.3 the sales performance of crop insurance and awareness level of commercial farmers have the strongest positive relationship. 1 unit increment in Awareness level of commercial farmers can cause about 28% growth in sales of crop insurance. This corroborates with the views of G/Giorgis (2014), Geoffroy, Fabian & Felice (2012), Timothy & Richards (2000) and Ebitu, Ibok, Mbum (2012) who found in their respective studies that increasing the level of awareness would have a positive impact on consumption or sales performance.

The second variable under study was accessibility and prompt service and according to the regression result, it has a positive relationship with the sales performance and a 1 unit increment on this variable will cause about 15.4% increment on sales performance of crop insurance. Here it's understandable that if one insurance company makes itself more accessible to the public or target market and provides prompt service to its customer the sales performance would increase. And these ideas were shared in the study by Fatima & Maria (2007) and Ebitu, Ibok, Mbum (2012) that providing a prompt and dependable service and being easily accessible to the public is a good way to construct a long run healthy relationship with customers who in turn increase consumption of insurance.

The third variable was Professionalism, this factor also have a positive relationship with the sales performance of crop insurance with a magnitude of 1 unit increase in Professionalism causes about 14% increase in sales. This finding also got along with that of G/Giorgis (2014), G/Mariam (2014) and Fatima & Maria(2007) that stated on their respective findings that the insurance companies should have their professionals well informed and up to date about the policies they sell to be of more informative to their customers while selling the policies since the insurance companies fight for the same customers, establishing an informative, honest, and open relationship with potential customers would allow a seed of trust to be planted with them. In the long run, trust and integrity along with good prices would allow better chances to retain loyal customers than attracting them through swift measures.

The other factor under study was premium, and this factor has a negative relationship with the sales performance with 1 unit increment in premium will cause about 11.8% decrease in sales performance of crop insurance. The findings under the study of Geoffroy, Fabian % Felice in 2012 and Timothy & Richards in 2000, also stated that an increase in premium rate would have a negative impact on the consumption. And insurance companies should charge a competitive price or premium.

The final factor this study considered was scope of policy cover, and as per the result it has a positive relationship but with relatively lower impact which is a 1 unit increase in scope of cover would have an impact of about 7.8% increase in sales performance. And this finding supports the finding under the study of G/Giorgis (2014) that mentioned rigid scope of policy cover is a reason for low consumption and recommending that insurance companies should be more flexible on their scope of cover to meet their customers' need which eventually improve the consumption of insurance.

CHAPTER FIVE

SUMMARY, CONCLUSIONS, LIMITATION AND RECOMMENDATIONS

This concluding chapter summarizes the objectives of the study, the major findings and conclusions. It also discusses the managerial and theoretical implications of the study, and makes recommendation for further research.

5.1 Summary

The purpose of the study was to identify and examine those factors within insurance institutional and personal framework that affect sales performance of crop insurance at the Ethiopian Insurance Corporation. Accessibility & prompt service, awareness, premium, professionalism and scope of cover, were the key factors identified by the top management of the corporation using interview.

The study employed a mixed method specifically a sequential exploratory method. Using qualitative methods, semi-structured interview to be exact, to help the researcher get insights of factors that are affecting the sales performance of crop insurance then used structured questionnaires to collect explanatory data and analyze the cause and effect relationship between the earlier identified factors and sales performance of crop insurance using multiple linear regression model. Before directly analyzing the data gathered by the questionnaires, the researcher make sure the necessary assumptions that are required to undertake multiple linear regression analysis were fulfilled. Based on the analysis of data and discussion of results, the followings are the summary of major findings of this study.

The descriptive analysis shows that majority of commercial farmers are matured. And experience is more valued than education in this sector.

The results on economic demographics of commercial farmers' shows the commercial farmers are yet to develop and involve themselves in to highly mechanize large farms since most of the farmers are still small in size. Crop insurance coverage is very low, 75% of the sampled commercial farmers were not insured in the first place. Out of the total revenue collected by the

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commercial farmers which amounted about Birr 661 million, the amount insured was only amounted to about Birr 56 million which was very low.

The last year's production yield in quintal was also low. These facts can be attributed to the problems mentioned on the first chapter of the study which is fear of risks.

ANOVA, R (coefficient of correlation) and adjusted R-square (coefficient of determination) were used to test the model's overall fitness, and it turns out all the factors identified before had a statistically significant relationship with the dependent variable (Sales performance of crop insurance). The R and adjusted R-square results showed that the factors identified are highly correlated with the dependent variable and more than 89% variation of the sales performance of crop insurance is explained by those identified factors.

Concerning the individual variables, the sales performance of crop insurance and awareness level of commercial farmers has the strongest positive relationship. 1 unit increment in awareness level of commercial farmers can cause about 28% growth in sales of crop insurance. The second variable under study was accessibility and prompt service and according to the regression result, it has a positive relationship with the sales performance and a 1 unit increment on this variable will cause about 15.4% increment on sales performance of crop insurance. The third variable was professionalism, this factor also has a positive relationship with the sales performance of crop insurance of crop insurance with a magnitude of 1 unit increase in professionalism causes about 14% increase in sales. The other factor under study was premium, and this factor has a negative relationship with the sales performance of crop insurance. The final factor this study considered was scope of policy cover, and as per the result it has a positive relationship but with relatively lower impact which is a 1 unit increase in scope of cover would have an impact of about 7.8% increase in sales performance.

5.2 Conclusion

The general purpose of this study was to identify and examine those factors within insurance institutional and personal framework that affect sales performance of crop insurance at Ethiopian Insurance Corporation. And to this end, the study sought to identify the most important factors that are behind the poor sales performance of crop insurance in the corporation.

The study had five specific objectives. These included; determining the socio-economic characteristics of crop insurance consumers in Ethiopia, determining the status of crop insurance coverage in Ethiopia, determining institutional and personal factors within insurance marketing framework that may affect sales performance of crop insurance, and analyze the effect or relationship between the identified factors and sales performance of crop insurance then finally to explore avenues upon which a pulsating sales performance of crop insurance could be developed in the EIC as well as in Ethiopia.

Therefore, after gathering data using interview with the top management of the corporation and administering questionnaires to sampled commercial farmers and management staffs of the corporation, and analyzing it using spreadsheet and SPSS, The study came up with the following results;

The descriptive analysis on the socio-economic characteristics of crop insurance consumers in the country indicated that the majority of commercial farmers are matured, well experienced with their field, and experience is more valued than education in this sector. Commercial farmers are yet to develop in terms of size, production yield in quintal was also low and the profit level of the farmers were also low

From the data that shows about last year's crop insurance coverage, the figures depicted the fact that crop insurance coverage is very low, only 25% of the sampled commercial farmers were insured last year, meaning the other 75% of the commercial farmers were not insured in the first place. Out of the total revenue collected by the commercial farmers which amounted about Birr 661 million, the amount insured was only amounted to about Birr 56 million which was very low.

After undertaking interviews with the top management of the corporation, the researcher came up with the factors that are affecting the sales performance of crop insurance. Those factors the corporation's management believed to have an impact on the poor sales performance were low level of awareness about the uses and benefits of crop insurance, low level of accessibility and delayance in service delivery due to very limited agricultural experts, low level of professionalism that came due to low level of knowledge about the crop insurance between the staff members of the corporation, rigid scope of policy cover that are due to reinsurers fear of risk

and information asymmetry and expensive premium rate as perceived by the public relative to that of private insurance companies.

The study then used regression analysis to understand and examine the relationship of those identified factors with sales performance of crop insurance. And based on the findings from the regression analysis, the researcher concluded that, those factors identified by the management of the corporation are indeed the institutional and personal factors that inhibit the sales performance in the corporation and that the seemingly low sales performance of crop insurance is as a result of low level of awareness of the public about the uses and benefits of crop insurance, low level of accessibility and delayance in service delivery, low level of professionalism, rigid scope of policy cover and expensive premium rate as perceived by the public relative to that of private insurers. And all factors except premium showed a positive relationship with the sales performance. Moreover, all the independent variables have significant relationship and contribution with the dependent variable.

The relative importance of the factors to the sales performance of crop insurance is determined by looking at their respective beta coefficients. With beta coefficient of 0.277, Awareness has the highest impact on the sales performance. That indicates for a 1 unit change in awareness there will be almost 28% change in sales. And with beta coefficient of 0.078, Scope of cover has the lowest impact on sales performance which is 1 unit change in scope of cover will only cause7.8% change in sales performance.

The final specific objective, exploring avenues upon which a pulsating sales performance of crop insurance could be developed in the EIC as well as in Ethiopia, is discussed in detail under the recommendation section below.

5.3 Limitation of the study

No study is without limitation. (Berg, 2001)Accordingly, this study is subject to the following limitations that future studies should address to shed more light on the subject of sales performance of crop insurance.

Even though it's very important to cover the insurance industry as a whole, because of the limitation of resources like finance, data and most importantly time, this study only considered the case of Ethiopian Insurance Corporation especially in sales performance of crop insurance. So the researcher advice future researchers to perform a study considering wider scope like in the industry as a whole and overall agricultural insurance.

It's never accurate taking sample as of taking the whole population, so due to time barriers and financial limitation this study was forced to take sample study. So the researcher recommends future studies to consider on taking a census or wider sample to get more precise and accurate picture on the findings generalizability.

The absence of similar studies on this specific field in the country is another limitation to this study, because if it was to the contrary, the researcher would have use it to substantiate its findings and also use it as a base for the study.

5.4 Recommendation

In this ever growing competitive insurance industry, an insurance company must be at the head of the game on every aspect of the service delivery. And to do that it's advisable for the corporation's management to utilize different scientific models to predict major contributing factors of sales performance of its different types of insurance products so they can focus on the most important ones.

This research provided the corporation with some useful information regarding the sales performance of crop insurance. And it is likely to contribute in a significant way to the management of the corporation providing a set of information that revealed the factors most important to commercial farmers to buy the crop insurance.

Based on the findings of the study the following recommendations are given.

1. Improve the level of awareness of the commercial farmers

The study provides empirical support that sales performance of crop insurance of the corporation could be significantly influenced by improving the level of awareness on the uses and benefits of crop insurance to the target population. So the researcher advice the corporation to exert its maximum effort on improving the awareness level of

the target population and more insurance education and publicity should be routinely carried out using available and appropriate media of communication.

2. Improve Accessibility and speed of service delivery

Since the study also revealed that, the factor accessibility and prompt service is another significant influencer of sales performance, so the researcher advice the corporation considering its financial viability to improve its accessibility by employing more agricultural experts and have them work at the outlying branches and districts rather than accumulating them at the head office. And these actions surely answer the customer's insurance request on time. This in turn solves its delayance of service delivery. This action will eventually increase the expense of the corporation but as a governmental organization and also as a leader of the insurance market, the corporation should not only consider the expenses rather the social benefits like decreasing the unemployment rate of the country, and also be an exemplary institution.

3. Improve professionalism

Professionalism, with its positive and significant relationship with the sales performance of crop insurance, it goes without saying, the corporation has to improve the level of professionalism in the corporation. Therefore to promote insurance practice and equip them for better customer service, everyone selling insurance must be made to possess standard academic and professional qualifications, with a well-established ethics and code of conduct, and adequate enforcement mechanisms set up as a benchmark, for this is the only way the corporation can maintain an exquisite professional identity.

4. Charge competitive premium

Even though the management of the corporation believed the corporation is charging fair premium, and as per the empirical findings of the study, with its negative relationship with sales performance of crop insurance, the researcher recommends to the management of the corporation either to consider its premium rate with that of the private insurance companies or create good understanding with the farmers that it is charging fair premium or perhaps differentiate itself from the competitors to minimize the effect of premium.

5. Improve the level of flexibility on scope of policy cover

Even though the factor scope of policy cover has relatively the lowest impact on sales performance of crop insurance, the corporation as a governmental organization should have the courage to assume the risk of being flexible with the scope of cover and lead the way to other insurers in the market.

Generally speaking, a properly designed and implemented crop insurance program will protect the numerous vulnerable small and marginal farmers from hardship, bring in stability in the farm incomes and increase the farm production. (Bhende, 2002)And supporting the agricultural sector would mean supporting the economy and supporting government agenda as a whole since the agricultural sector constitute for major portion of the country's economy and also it would mean that the corporation is fulfilling its duty and also practicing what's on the mission statement of the corporation in the first place which is being a development partner.

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APPENDICES

St. Marry University

School of Graduate Studies

Post Graduate Program in Business Administration

Dear Respondents,

This questionnaire is designed to collect data about the sales performance of crop insurance in Ethiopian Insurance Corporation, here in after called the corporation. The information that you offer me with this questionnaire is used as a primary data in my study which I am conducting as a partial fulfillment of the requirements for the degree of Master of Business Administration (MBA) at St. Marry University. This research is to be evaluated in terms of its contribution to the understanding of factors affecting sales performance of crop insurance in Ethiopian Insurance Corporation and has paramount importance for improvements in the sector.

Therefore, I kindly and earnestly request you respond to all questions contained in this questionnaire by giving your honest answers. I want to assure you that this research is only for academic purpose authorized by the St. Marry University. No other person could access the collected data. Your response is handled confidentially and interpreted impartially. In the end, I would like to express my deep appreciation for your generous time and prompt responses.

Thank you.

General Instructions

- \checkmark No need of writing your name.
- ✓ In all cases where answer options are available please tick ($\sqrt{}$) in the appropriate box.

Appendix A

Interview Questions for Top Management staffs

1. List the first five qualities that come into your mind when you think of qualities an insurer shall possess to sell its insurance policies widely?

2. Does your company possess those qualities?

- 3. Where do you categorize your company's sales performance of crop insurance, (poor, ok, or great)? Why?
- 4. What are the factors that contribute to the sales performance of crop insurance of your company?

5. Do you think your company fulfill the crop insurance customer's expectation and needs?

6. Anything more you want to discuss regarding sales performance of crop insurance?

Appendix B

Questionnaire to be filled by Ethiopian Insurance Corporation's Management Staff

PART I: Demographic Information

1.	Age
	18-2 24-29 30-35 36-40 Above 40
2.	Experience in years
	Below 5 5-10 11-15 Above 15
3.	Education level
	Certificate Diploma 1 st degree Master's Degree
	Above master's degree

PART II: Please state your level of agreement or disagreement for each given statement using the following scales:

1 = strongly disagree 2 = disagree 3 = Neutral 4 = Agree 5 = strongly agree

Factors	Lev	Level of Agreement			
Sales Performance of Crop insurance					
The annual gross premium collected by the corporation from crop insurance is low relative to other types of General insurance policies					
The gross premium collected from crop insurance not showing the same improvement as others types of General insurance policies					
The share of crop insurance against other types of General insurance products is low					
Overall sales performance of crop insurance is not at the desired level					

-End of the questionnaire-
Appendix C

Questionnaire to be filled by Commercial farmers

PART I: Demographic Information

1. Age 18-23 24-29 30-35 36-40 Above 40
2. Experience in years Below 5 5-10 11-15 Above 15
3. Education level
Illiterate (read & write only) Attended primary
Attended high school Certificate Diploma
1 st degree Master's Degree Above master's degree
4. Size of land covered with crop last year or season (in square meter)
5. Approximate amount of capital invested on crop production last year in birr
6. Amount of crop insurance covered last year in birr
7. Size of last year's yield in quintals
8. Total revenue earned from crops sold last year in birr
9. Net profit earned from crops sold last year in birr
10. Have you ever tried to insure your crop? Yes No

PART II: Please state your level of agreement or disagreement for each given statement using the following scales:

Factors	Lev	vel of	Agreement		
		1			
Accessibility & Prompt Service					
The Corporation doesn't have enough agricultural experts at its					
disposal					
The Corporation doesn't have agricultural experts at its branches					
nearby to our farm					
The Corporation doesn't answer our insurance request on time					
The Corporation's delayance in service is keeping me from buying the					
policy					
Professionalism					
Knowledge Level of the Corporation's staff members regarding crop					
insurance is low					
The corporation's staff members doesn't promote the crop insurance					
well					
The corporation's staffs doesn't inform us what we need to know					
about the terms and conditions of the policy during buying the crop					
insurance					
The Corporation staffs' are poor on handling customer during claim					
settlements of crop insurance					
Scope of policy cover					
The Corporation's crop insurance policy covers are limited					
The Corporations is rigid with the policy terms and conditions	_				
The Corporation doesn't meet our needs regarding additional covers					
Awareness					
I don't know enough about crop insurance					
I don't know the benefits and importance of crop insurance	1				

1 = strongly disagree 2 = disagree 3 = Neutral 4 = Agree 5 = strongly agree

I never heard of the Corporation advertising crop insurance			
My poor knowledge and awareness about crop insurance is keeping me from buying the policy			
Premium			
The Corporation's premium for crop insurance is expensive			
There is no credit facility available			
I will buy if the corporation decreases the premium for crop insurance			

-End of the questionnaire-

DECLARATION

I the under signed hereby declare that this thesis has been prepared by me in partial fulfillment of the requirements for the award of a Master's degree in Business Administration. I wish to state that this work has never been presented in any University or Institution of learning apart from references made to the works of other people for which I have dully acknowledged. Therefore it is an original work done by me under a close supervision of my advisor.

Name

Signature

St. Mary's University, Addis Ababa

June, 2015

STATEMENT OF CERTIFICATION

This is to certify that Biniam Shiferaw has carried out his research work on the topic titled as: "Factors Affecting Sales Performance of Crop Insurance at Ethiopian Insurance Corporation". The work is original in nature and is suitable for submission for the award of Master's Degree in Business Administration.

Advisor: _____

Signature: _____

Date: _____