THE CONTRIBUTION OF ENTERPRISE ESTABLISHMENT FACTORS TO THE GROWTH OF PINEAPPLE INDUSTRY IN THE NSAWAM-ADOAGYIRI DISTRICT IN THE EASTERN REGION OF GHANA

BY

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THIS THESIS IS SUBMITTED TO THE UNIVERSITY OF GHANA, LEGON IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF MASTER OF PHILOSOPHY DEGREE IN AGRICULTURAL EXTENSION

DEPARTMENT OF AGRICULTURAL EXTENSION
COLLEGE OF BASIC AND APPLIED SCIENCES
UNIVERSITY OF GHANA, LEGON

JULY, 2015
DECLARATION

I hereby do declare that this thesis, with the exception of references and ideas attributed to specific sources is entirely my own work as a result of research carried out under supervision. That no such work has been presented to this university or elsewhere, either in part or whole for the award of any degree.

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ABSTRACT

The establishment of agro enterprises is influenced by various factors identified in the theories of enterprise establishment which most entrepreneurs do not pay particular attention to when establishing and managing their enterprises. The aim of this study is to examine how enterprise establishment factors contribute to the growth of the pineapple industry. The enterprise establishment or founding factors identified and examined in this study are the basic tasks identified by the entrepreneur, funds availability for enterprise establishment, business information and entrepreneur’s expertise. A mixed model research design was used in this study with the collection of both quantitative and qualitative data. Data was collected from 172 entrepreneurs in the pineapple industry from eight (8) farmer based organizations in the Nsawam-Adoagyiri District of Ghana using a simple random sampling technique and analyzed with SPSS software. Results show that funds availability for enterprise establishment and access to business information by the entrepreneur contributes significantly to employment growth of the pineapple industry, and technological growth. Sources of business information contribute to sales growth, and technological growth of the pineapple industry. Entrepreneur’s educational background and previous work experience were found to contribute significantly to entrepreneur’s expertise in the establishment and management of the pineapple industry. It was however identified that the entrepreneur’s expertise from educational background does not affect the growth of pineapple enterprises. Meanwhile, entrepreneur’s expertise gained from previous work experience was found to contribute to employment and technological growth of the pineapple industry due to the human resource management, and technical skills acquired by entrepreneurs in their previous works. It can therefore be concluded that enterprise establishment factors do not only influence entrepreneurial or enterprise establishment process but also contribute variedly to the growth of pineapple industry. The study recommends that education on agro enterprises in educational institutions, and the provision of adequate knowledge on funds availability to would be entrepreneurs should be carried out to enhance their capability in enterprise establishment and growth.
DEDICATION

This work is dedicated to my lovely wife Fortune Agbe and Children Elikem Yayra Agbe, Mawuena Agbe who inspired me to achieve more.
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<th>Full Form</th>
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<tr>
<td>AfDB</td>
<td>African Development Bank</td>
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<td>BACs</td>
<td>Business Advisory Centres</td>
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<td>EDAIF</td>
<td>Export Development and Agricultural Improvement Fund</td>
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<td>EU</td>
<td>European Union</td>
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<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>GSGDA</td>
<td>Ghana Shared Growth Development Agenda</td>
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<td>GPRS II</td>
<td>Ghana Poverty Reduction Strategy II</td>
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<td>GPSDF</td>
<td>Ghana Private Sector Development Fund</td>
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<td>FASDEP</td>
<td>Food and Agriculture Sector Development Programme</td>
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<td>FAO</td>
<td>Food and Agriculture Organization</td>
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<td>FinGAP</td>
<td>Financing Ghanaian Agriculture Project</td>
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<td>IDB</td>
<td>Inter-American Development Bank</td>
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<td>MoFEP</td>
<td>Ministry of Finance and Economic Planning</td>
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<td>METASIP</td>
<td>Medium Term Agricultural Sector Investment Plan</td>
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<td>MSEs</td>
<td>Micro and Small Enterprises</td>
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<td>MTDPF</td>
<td>Medium Term Development Policy Framework</td>
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<td>NBSSI</td>
<td>National Board for Small Scale Industry</td>
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<td>NDPC</td>
<td>National Development Planning Commission</td>
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<tr>
<td>OECD</td>
<td>The Organization for Economic Co-operation and Development</td>
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<td>UNCTAD</td>
<td>United Nation Conference on Trade and Development</td>
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CHAPTER ONE
INTRODUCTION

1.1 Background of study

The importance of Small and Medium Scale Enterprises (SMEs) as a key driver of economic growth and employment is now widely accepted in both developed and developing countries (UNCTAD, 2005; EU, 2011). In Ghana, almost 80% of the economy is made up of SMEs (NDPC, 2010). According to Korean Development Institute (2008) SMEs in Ghana constitute more than 90% of business units and provide employment for more than 60% of employed labour force. SMEs account for about 22% of Gross Domestic Product, principally in the agricultural and transport sectors (AfDB/OECD, 2005).

SME establishment involves the organization of resources in an economic environment. Resources identified in any economy include intellectual, human, social and financial resources. Entrepreneurs organize these resources in an economic environment to pursue market opportunities. The activities of these entrepreneurs lead to the creation of firms or enterprises. These firms create output and jobs as a by-product (Acs and Armington, 2003). The entrepreneur’s activity therefore benefits the buyer, the seller, and more generally, the entire economy (Holcombe, 2003) in the area of job creation and employment.

Recognizing the vital role SMEs play in the national economy, the sector has been given a serious attention in the various national development policies and programs (GPRS II 2006-2009, GSGDA 2010-2013) where SMEs are identified as the engine of
growth, wealth creation, and avenues for employment generation for majority of the citizenry. For instance the GSGDA 2010-2013, had strategic programs to provide training and business development services, enhance access to affordable credit, remove value chain constraints to promote productivity and efficiency, and provide incentives to develop Micro, Small and Medium Scale Enterprises (MSMEs) in the country. Also one major policy of GPRS II is to encourage the establishment of new businesses in the private sector by improving investment conditions for agriculture and fishing sector.

SMEs have also received attention in agricultural policies and programs (FASDEP II and METASIP, 2011-2015) where they have been recognized as components to increase growth in income of farmers through value addition. Some of the policies and programs include the promotion of primary grading, processing and storage to increase value addition and stabilize farm prices, collaboration with other stakeholders to develop institutional capacity to support commercial scale agro-processing and stock management, promote linkage of small holder production, and improve accessibility from farm to market centres.

The Medium Term Development Policy Framework (MTDPF) developed for the implementation of the Ghana Shared Growth Development Agenda (GSDA) among others had a strategy for developing viable and efficient SMEs as a driving force for economic growth and transformation through entrepreneurial and managerial training of entrepreneurs. The training is targeted at developing the skills of the entrepreneur to enhance the establishment, management, and growth of enterprises in the economy.
The entrepreneurs are frequently thought of as national assets to be cultivated, motivated and remunerated to the greatest possible extent. Entrepreneurs are involved in the creation of new businesses into the economy; contribute to the national economy through employment generation and payment of taxes to government, and also creating social change through the introduction of new products, services, and technologies. Also, the entrepreneur engages in community development projects in education, public health, and other areas to the benefit of the society.

The establishment and growth of SMEs is therefore not only important to the individual entrepreneur for monetary or social gains but also to the nation as a whole. De Kok et al. (2011) assert that, the establishment and growth of enterprises play a very important role in the creation of jobs. However they have identified that of the newly established enterprises, only 50 percent survive after 5 years. Factors affecting the growth and survival of enterprises include inadequate or unavailability of funds, inadequate business information, poor business management skills, poor marketing skills, land, and poor corporate governance (Mbugua, Mbugu, Wangoi, Ogada and Kariuki, 2013; Wong and Merrilees, 2005; Fjose, Grünfeld and Green, 2010; NDPC, 2010). For instance Mbugua et al. (2013) identified that inadequate finance affects the employment growth of enterprises.

Nichter and Goldmark (2005) also identified that many individual enterprises grow slowly or not at all – in some cases, due to a conscious decision on the part of the business owner. Entrepreneurs take decisions on whether or not to exploit an opportunity, how to react to competitors, whether or not to terminate the business
(Schade, 2010). These decisions taken by the entrepreneur during establishment and management of the enterprise affect its growth in terms of the number of employees to engage, the sales volume of produce, and the technology adopted for use in the enterprise.

In the agricultural sector, production, and value addition to agricultural produce is vital for agricultural and rural development. Aryeetey and Mensah (2008) identified that growth in agribusiness and agro-industries in Ghana is fundamental to the process of agricultural transformation and the pursuit of national agenda in attaining the status of an agro-based industrialized economy. The agricultural industry offers a broader spectrum of activities that comprises production, retailing, processing, exporting and marketing. Growth in agricultural enterprises will be characterized by increase in the number of people employed in the sector, increase in the supply of products resulting in the increase in sales volume of the enterprises, and the advancement in technology usage. Aryeetey et al. (2008) also noted that for wage employment and economic development the agricultural industry is the way to go.

AfDB/OECD (2005) reported that in Ghana 40 percent of all agricultural output is wasted annually due to inadequate storage facilities, marketing chains, and poor infrastructure. This waste can be reduced when more agro enterprises are established along the value chain of all agricultural products. Meanwhile, the rate at which people are establishing enterprises and the rate at which the established enterprises are growing are not encouraging enough to solve the problems of produce wastage in the country. There is therefore the need to investigate the enterprise establishment factors that
contribute to the growth of these agro enterprises with a focus on the pineapple industry.

1.2 Study Context

There is no universally accepted definition of SMEs and different regions or countries have defined SMEs based on local operations and conditions (Agyapong, 2010). SMEs are mostly defined using the number of employee and turnover of the firm or enterprise. United Nation Industrial Development Organization (UNIDO) segregated the definition SMEs for both developed and developing countries. According to UNIDO’s definition for develop or industrialized countries, SMEs are categorized as; Large - firms with over 500 workers; Medium - firms with 100 to 499 workers; and small – firms with less than 99 workers. In developing countries the categorizations are; Large - firms with over 100 workers; Medium - firms with 20 to 99 workers; Small - firms with 5 to 19 workers; and Micro – firms with less than 5 workers.

In Ghana, NBSSI (1998) has provided an operational definition of SME to include the following: Small business is any business that employs up to 29 people; and small business is divided into: the micro, small and medium enterprises. The micro enterprises employ up to 5 employees with fixed assets (excluding land and building) not exceeding the value of $10,000; small enterprises are those enterprises employing between 6 and 29 employees or having fixed assets excluding land and building not exceeding $100,000 and medium enterprises employ between 30 and 99 employees with fixed assets of up to $1m.
This study adapts the definition of SMEs by NBSSI. These SMEs according to Mensah (2004) are dominated by one person, who is also owner/manager who takes all major decisions from start up to management decisions. The SMEs in Ghana are characterized by weak management skills, weak market links, lack of finance, and obsolete technology thus inhibiting the development of a strategic plan for sustainable growth (Agyapong, 2010; NDPC, 2010). These SMEs are engaged in all sectors of the economy thus agriculture, transports, manufacturing, agro processing, services among others.

The focus of this study is on agro enterprises. An agro enterprise in the context of this study is defined as any enterprise formed within the agricultural value chain. This includes enterprises in the production of crops and livestock, marketing of agricultural produce, processing of agricultural produce and the provision of services (sale of inputs and advisory service). The pineapple industry is an active agro enterprise in the Eastern Region of Ghana. There is wide range of entrepreneurial activities in the pineapple industry therefore the growth of the sector would affect the agriculture in the country.

### 1.3 Problem Statement

The pursuant of enterprise establishment (entrepreneurship) is perceived as a way of tackling the problem of unemployment and poverty (Robson, Wijbenga and Parker, 2009). The entrepreneurial process engaged by entrepreneurs through the recognition of opportunities and acquiring the necessary resources to create an enterprise results in the formation of MSMEs. These enterprises employ more than 90 percent of the total workforce (The New Legon Observer, 2008). In Ghana, SMEs are principally in the
agricultural and transport sectors (AFDB/OECD, 2005). The agricultural sector in Ghana employs more than half (55.8%) of the workforce (Otoo, Osei-Boateng and Asafu-Adjaye, 2009). This makes the sector important in the area of employment generation since the sector offers a broader spectrum of economic activities. The establishment of enterprises in the agricultural sector will not only create jobs for people in the economy but also help control post harvest losses in the country.

Post harvest losses lead to the wastage of agricultural output in the country. The waste generated in agricultural output is due to the glut of produce during peak seasons, and inadequate storage and processing infrastructure along the value chain. This glut of produce observed along the value chain can be solved by the establishment of effective and efficient agro enterprises. However, the agro enterprises in the country are limited in number, the existing enterprises are struggling to grow and others have collapsed. De Kok et al., (2011) assert that, of newly established enterprises, only fifty (50) percent survive after 5 years. In Chile, less than forty-two (42) percent of small businesses survive five years and less than fifty (50) percent survive ten (10) years (Cabrera et al., 2002). Also Barringer, Jones and Neubaum (2005) identified that out of the estimated seven hundred thousand (700,000) new ventures started each year in the United States, only 3.5 percent grow sufficiently to actually evolve into large firms.

The growth of enterprise is seen as the development process of an enterprise from small through to medium to large (Mao, 2005). Numerous problems have been identified by various researchers in the field of enterprise growth as contributing factors for slow growth or collapse of enterprises (Krake, 2005; Wong and Merrilees, 2005; MoFEP,
Access to credit, market, land, and poor corporate governance are identified factors affecting enterprise growth (MoFEP, 2012). Tawiah et al., (2013) argued that growth is not only affected by credit accessibility of SMEs but also the unfavourable business environment. Fjose et al. (2010) posit that micro firms among other things struggle with lack of knowledge and relevant competencies which constrains their growth. However, these researchers measure growth of the firm typically at the business level (Kruger, 2004) with little or no focus on factors that lead to the establishment of the enterprises.

A review of theories of enterprise establishment (Bull, Thomas and Willard, 1995; Schoonhoven and Romanelli, 2001) shows that enterprises are created or formed through the occurrence of certain phenomena. It is expected that when the entrepreneur identify basic task to meet societal needs, have the requisite skills, operates in a favourable business environment and secures the relevant resources to establish the enterprise, then enterprise growth may be achieved. Also, entrepreneurs around the world attribute much of their success to past work experience and knowledge of the industry, in addition to business contacts obtained through personal social networks and educational background (Nitcher and Goldmark, 2005).

Apart from entrepreneurs acquiring experience and knowledge from their previous works and educational background, many public agencies are established to assist entrepreneurs in the acquisition of skills. Some of these agencies in Ghana include the NBSSI, the AGI, GRATIS foundation, among others. In addition to these agencies that
provide skill training for entrepreneurs, other agencies which provide funding have been set up to provide the needed financial assistance to entrepreneurs for the establishment and development of their enterprises. Examples of such funds include the Enterprise Development Fund, Export Development and Agricultural Improvement Fund, Skill Development Fund, among others. However, with the large number of agencies and funds instituted in the country, the enterprises are not experiencing the necessary growth for development (UNCTAD, 2005, Ahiawodzi and Adade, 2012). It has been identified that entrepreneurs do not have the requisite knowledge about sources of funds and relevant business information for enterprise establishment thereby hindering enterprise growth.

Enterprise growth is mostly viewed in the context of internal and limited external factors (Pitelis, 2009; Mao, 2005), without due consideration to the contributory factors leading to the establishment of the enterprise. However, Delanoë (2013), Gilbert, McDougall and Audretsch (2006), Masakure, Henson and Cranfield (2006), and Akoten, Sawada and Otsuka (2006), have identified that factors associated with enterprise establishment (type of enterprise, funds availability, business information and expertise) have a relationship with establishment and growth of the enterprise. Meanwhile most entrepreneurs do not pay particular attention to these factors when establishing enterprises (Tushabomwe-Kazooba, 2006). This study is therefore designed to investigate the contribution of enterprise establishment factors to the growth of agro enterprise in the Nsawam-Adoagyiri District in the Eastern Region of Ghana with focus on the entrepreneurs in the pineapple industry.
1.4 **Main Research Question**

The study proceeds on the research question;

- How do enterprise establishment factors contribute to the growth of the pineapple industry?

1.5 **Specific Research Questions**

The specific research questions of the research are as follows;

i. How do enterprise characteristics contribute to the growth of the pineapple industry?

ii. What is the contribution of funds availability for enterprise establishment to the growth of the pineapple industry?

iii. What is the contribution of business information to the growth of the pineapple industry?

iv. How does entrepreneur’s expertise contribute to the growth of the pineapple industry?

1.6 **Main Objective**

To determine how enterprise establishment factors contribute to the growth of the pineapple industry in the Nsawam-Adoagyiri District in the Eastern Region of Ghana.

1.7 **Specific Objectives**

i. To determine the contribution of enterprise characteristics to the growth of the pineapple industry in the Nsawam-Adoagyiri District.
ii. To examine the contribution of funds availability for enterprise establishment to the growth of the pineapple industry in the Nsawam-Adoagyiri District.

iii. To determine the contribution of business information to the growth of the pineapple industry in the Nsawam-Adoagyiri District.

iv. To investigate the contribution of entrepreneur’s expertise to the growth of the pineapple industry in the Nsawam-Adoagyiri District.

1.8 Justification of Study

Bruyat and Julien (2000) stated that, the project of researchers in the field of entrepreneurship is to permeate the “black box” in order;

a. To understand or, if possible, predict the phenomenon of new value creation initiated by individuals

b. To understand or “predict” their success, failure or performance.

The study into the factors associated with enterprise establishment and its contribution to the growth of agro enterprises is in line with the objectives in the field of entrepreneurship research since it will create an understanding of enterprise performance in terms of growth. Also, agro enterprises play a very important role in development of the country in the area of job creation and food security. Research into its growth would help in the formulation of a more defined targeting strategy by government and development practitioners to combat the problem in the agricultural sector and curb unemployment. The study would also contribute towards knowledge in the area of enterprise establishment and growth.
1.9 Outline of the study report

Chapter One looked at the background of the study, the context in which the study is carried out and the problem statement. It also stated the research questions, the objectives of the study and the relevance of the study. Literature and theories underpinning the study are reviewed in the Chapter Two. The conceptual framework of study, importance of SMEs to national development, policies and programmes of government for enterprise development was also discussed in Chapter Two. This is followed by Chapter Three which describes the methodology, the type of method employed and how data was collected and analysed. Chapter Four presents the findings and discussions of results whiles Chapter Five presents a summary of the results, conclusion and recommendations for policy makers and further research.
CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter focuses on the theoretical reflections and examines propounded theories underpinning the problem under investigation. This includes the conceptual framework of the study, the concept of agro enterprises, concepts of enterprise establishment process, theories of enterprise establishment, factors of enterprise establishment, enterprise growth and the definition of various concepts used in the study. Other relevant topics discussed include, the importance of SMEs to national development, government policies on SMEs in Ghana and a discussion on the pineapple industry in Ghana.

2.1 Conceptual framework of study

The enterprise establishment goes through the process of opportunity recognition, information seeking and learning, resource acquisition and the selection of enterprise strategy (Westhead et al., 1999). These processes are influenced by factors such as the expertise of the entrepreneur, the supportive business environment in a particular country and the characteristics of the enterprise. These factors are derived from two theories of enterprise establishment thus the discontinuity theory of enterprise establishment and the theory of previous organizational background.

According to Bull et al (1995), a new combination, causing discontinuity will be created, i.e., entrepreneurship will occur, under conditions of; task – related motivation,
expertise, expectation of gain for self and a supportive environment. The factors or variables identified in the discontinuity theory include the basic task identified thus the characteristics of the enterprise, the expertise of entrepreneur available for the establishment of the enterprise, and the supportive business environment. The basic task motivation identified in the discontinuity theory of enterprise establishment is redefined as the characteristics of the enterprise. These include the type of enterprise operated by the entrepreneur and customer needs that products meet.

There are various factors in the supportive business environment identified by researchers as affecting the establishment and growth of enterprises. These include the financial environment, legal environment, government policy and programmes, business information environment, and many other factors. This study identified three factors that are of immediate relevance to the agro industry. These are funds availability for enterprise establishment, access to business information and business information sources.

The second theory underpinning the study is the theory of previous organizational origin which states that occupation, previous educational background and information source have significant influence on the decision of an individual to start a new enterprise and the characteristics of the new enterprise (Schoonhoven et al., 2001). Many researchers have pointed out various relationships that exist between an individual’s knowledge or expertise in enterprise establishment, their educational background, and previous work backgrounds (Uhlaner et al., 2004; Blanchflower, 2004; Ardichvili et al., 2003; Lu et al., 2010). The expertise identified in both theories would
be investigated using the educational background of the entrepreneur and the previous work experience of the entrepreneur.

Enterprise characteristics (type of enterprise and customer needs), funds availability for enterprise establishment, business information (access to business information and business information sources), and expertise (expertise from educational background and expertise from previous work background) are the variables identified for investigation in this study. These variables are referred to as enterprise establishment factors. These factors enhance the enterprise establishment process thus opportunity recognition, information seeking and learning, resource acquisition, and enterprise strategy selection which is likely to influence the growth of the enterprise.

Enterprise growth is viewed as the scale extension in the number of employees, sales volume, and improvement in technology. These are referred to as employment growth, sales growth, and technological growth in the study. Employment growth is considered as the change in the number of employees, and sales growth is regarded as change in sales volume of product. Technological growth is defined as the advancement or improvement in technological usage from “manual” technology to “mechanical” technology.

The growth of an enterprise is influenced by various factors such as the opportunity and capabilities available for the enterprise and the human resource and management skills. Other factors which can affect enterprise growth include the policies and programs of government, the socio cultural environment in which the enterprise is operating in, the
availability of appropriate technology (technological environment) and sustainability objectives of the enterprise. The diagram below shows the link between the various concepts in the study.

**Figure 1: Conceptual Framework of study**

**Factors of enterprise establishment**

**Enterprise characteristics**
- Type of enterprise
- Customer needs that products meet

**Funds availability for enterprise establishment**

**Business information (access and source)**

**Entrepreneur’s Expertise**
- Educational background expertise
- Previous work background expertise

**Enterprise establishment process**
- Opportunity recognition
- Information seeking and learning
- Resource acquisition
- Selection of enterprise strategy

**Enterprise Growth**
- Employment growth
- Sales growth
- Technological growth

**Business environment (policies, programmes)**
- Socio-cultural environment
- Technological environment
- Business Sustainability objectives

Source: This Study
2.2 Agriculture as a business

Agriculture is viewed as the science or practice of farming, including cultivation of the soil for the growing of crops and the rearing of animals to provide food, wool, and other products. According to Kahan (2015) agriculture is mostly considered by farmers for one of the four reasons below;

i. Farmers who farm exclusively for home consumption with rarely any surpluses produced. For these farmers if there is a surplus, they will sell it on the market, but this is very rare. Often these farmers are struggling with the basic survival of themselves and their families. They usually lack security in terms of health, water, food and shelter. They are rarely in the position to commit their minds and bodies to entrepreneurial tasks. While they may be entrepreneurial in spirit, they usually lack the opportunity to farm as entrepreneurs.

ii. Farmers who mostly farm for home consumption, but with the intention of selling surpluses on the market. These farmers produce beyond just surviving. They have a greater appreciation of the market and have expended their survival farming to include some economic activities. They are just starting out on the path towards developing profit-driven farming businesses. These farmers do yet see their farms as businesses. Long-term investment is not yet a priority. They are hesitant about diversifying to higher value products. They are comfortable selling surpluses of their food drops. Shifting to cash crops is too extreme and involves risks that they are not willing to take.
iii. Farmers who farm partly for the market and partly for home consumption. These farmers understand the value of farming for the market, but are often limited by access to finance, labour or market information. The elements are all there, but they cannot risk family food requirements without greater certainty of income from cash crops. The choice between producing primarily for the market with some produce utilised for home consumption or primarily for home consumption with some produce sold in the market depends on their circumstances and their willingness to take risks.

iv. Farmers who produce exclusively for the market. Farmers on the fourth rung are fully market oriented. Their primary reason for farming is to make profits by producing for the market. They are interested in profits, not food production. To be successful at market-oriented farming, the farmer needs greater farm management and entrepreneurial skills.

The first, second and third reasons stated by farmers for engaging in agriculture can be classified under farmers who view agriculture as a way of life. As a way of life these farmers produce towards meeting of basic need of food with less emphasis on market opportunities. They usually engage household labour which is mostly unpaid for.

The fourth reason for farmers engaging in agriculture is viewed as farmers who see agriculture as a business. These type of farming uses business principles so as to produce for profit. Business principles employed by these farmers include forecasting
and planning, organizing, commanding, coordinating and controlling (Stokes and Wilson, 2010; Longenecker, Petty, Palich, and Hoy, 2013). Forecasting and planning involves the development of a business plan for the farming business to foresee the future market demand and also develop strategies to satisfy the demand. Organizing involves the acquisition of materials and human capital for the attainment of farming business objectives. The farmers must set the business going to get the desired optimum results from subordinates, secure an orderly pattern of group effort among his personnel through unity of action to pursue the common goals, and ensure that everything is done in accordance with the established rules and instruction given to the workmen. All these business principles can be employed in all type of agriculture along the value chain. The next section provides an understanding into the nature of agro business

2.3 The nature of agro businesses

Agro businesses provide value-adding goods and services and take title to inputs and/or outputs within the agro food system (Jaffee, Kopicki, Labaste and Christie, 2003). These agro businesses make and sell inputs to farmers, process crops and livestock products, wholesale and retail of fresh and processed products to consumers, and/or process and sell raw materials. These enterprises can be located in rural or urban areas. They can be micro, small, medium or large, domestic or foreign, public or private, or a mix.

Agro businesses can be corporations, cooperatives, family-based entities or single proprietorship hence they are governed by varied sets of rules. Their technologies and
specialties will vary. Although frequently equated with ‘big business’ most agro business firms are small individual intermediaries (i.e., traders, transporters) and micro enterprises, often from the informal sector.

They are established by individuals or group of persons through entrepreneurial processes or enterprise establishment processes. It is therefore important to understand the concept of enterprise establishment in order to enhance the discussion on agro businesses. The next section explores the concept of enterprise establishment.

2.4 Concept of enterprise establishment

Hisrich, Robert, Peters and Shepherd (2005) defined entrepreneurship as ‘the process of creating something new with value by devoting the necessary time and effort, assuming the accompanying financial, psychic, and social risks, and receiving the resulting rewards of monetary and personal satisfaction and independence’. The definition stresses four basic aspects of being an entrepreneur regardless of the field. These are;

- entrepreneurship involves the creation process - creating something new of value
- entrepreneurship requires the devotion of the necessary time and effort
- assuming the necessary risks and
- the expectation of reward.

An enterprise is established by an individual undertaking the creation activities or process. The processes employed by an individual to establish new enterprises are
referred to as the enterprise establishment process or the entrepreneurial process. The entrepreneurial process involves all functions, activities, and actions associated with the perceiving opportunities and the creation of organizations to pursue them (Bygrave and Hofer, 1991). This shows how various activities undertaken by individuals emerge into the creation organizations or enterprises.

The entrepreneurial process is considered as possessing certain characteristics. Bygrave et al. (1991) and Wickham (2001) identified the key characteristics of the entrepreneurial process as follows;

- It is initiated by an act of human volition
- It occurs at the level of individual firm
- It involves a change of state
- It involves discontinuity
- It is a holistic process
- It is unique
- It involves numerous antecedent variables
- Its outcomes are extremely sensitive to initial conditions of these variables.

The process of enterprise establishment is also viewed as occurring at different stages and events that follow one another (Westhead and Wright, 1999; Bygrave, 2004). Westhead et al. (1999) identified that the entrepreneurial process involves the recognition or the identification of opportunities, the search for information and learning, resource acquisition, the selection of enterprise strategy and then the establishment of the new enterprise. Nassif, Ghozri and Da Silva (2010) presented the
stages of entrepreneurial process as; the idea or conception of the business, the event that triggers the operations, implementation and growth.

According to Kruger (2004), the entrepreneurial process is built on a cycle of four activities. These are innovation, a triggering event, implementation and growth. He further stated that during the cycle, different variables interact with the environment to influence the entrepreneurial process. Kruger argued that from an activity based perspective, the “triggering event” could perhaps be replaced by “launch or start up” and growth be regarded more as an outcome/result of activity “opportunity exploitation”. She then came out with a framework of activity entrepreneurial process as shown below;

Figure 2: Activity-based entrepreneurial process

Source: Kruger (2004)
Literature reveals that the enterprise establishment process depends on the entrepreneurs’ ability and the interactions within the socio economic and cultural environment (Delanoë, 2013; Cliff and Howard, 2003). Delanoë (2013) identified that pre-start up preparation by entrepreneurs is a valuable tool for enhancing the skills of entrepreneurs for the starting of a project or an enterprise. Also Cliff et al. (2003) found out that family system characteristics (transitions, resources, norms, attitudes and values) may either facilitate or impede individuals who are taking action to start their own business. The influencing factors of enterprise establishment activities are identified in the theories of enterprise establishment. The next section discusses the theories underpinning the study.

2.5 Theories of enterprise establishment

There are various theories underlining the establishment of enterprises. These include the discontinuity theory of enterprise establishment (Bull et al., 1995), the theory of previous organizational origin and ethnic minority theory of enterprise establishment (Schoonhoven et al., 2001). For the purpose of this study two of the theories thus the discontinuity theory and the theory of previous organizational origin are discussed.

2.5.1 Discontinuity theory of enterprise establishment

Bull et al. (1995) proposed that a new combination, causing discontinuity will be created, i.e., entrepreneurship will occur, under conditions of; task – related motivation, expertise, expectation of gain for self and a supportive environment. From the theory, the entrepreneur must identify the product or service that would meet the needs of the
society or the basic need that the products or services meet for the society. The entrepreneur must have the ability to acquire the expertise needed, deliver the identified product or service through his own abilities and capabilities or be able to acquire the needed expertise through the engagement of employees. Thus the entrepreneur believes in his or her capabilities to commence and complete things and events through his or her own actions (Virtamen, 2004).

The individual entrepreneur must also expect gains or benefit from the delivery of the product or service. Virtamen (2004) identified that for a self-employed worker the main expectation and objective may be to employ him or herself and enjoy the decent level of income and standard of living. The enterprise according to the discontinuity theory must operate within a supportive or enabling business environment. Enabling business environments are defined here as sets of policies, institutions, support services and other conditions that collectively improve or create a general business setting where enterprises and business activities can start, develop and thrive (Christy, Mabaya, Wilson, Mutambatsere, and Mhlanga, 2009). The environment shapes the costs and risks of doing business, hence the competitiveness of an enterprise and its value creation abilities (FAO, 2013).

2.5.2 Theory of previous organizational origin

The theory of previous organizational origin states that occupation, previous educational background and information source have significant influence on the decision of an individual to start a new enterprise and the characteristics of the new enterprise (Schoonhoven et al., 2001). People tend to notice information that is related
to information they already know (Von Hippel, 1994). Therefore, Shane (1999) postulated that entrepreneurs will discover opportunities because prior knowledge triggers recognition of the value of the new information.

From the two theories of enterprise establishment it can be identified that there are certain necessary conditions that must be considered for the creation of a new enterprise. These are the task motivation which represents the basic task identified by entrepreneur to meet basic needs of the society, the expertise of the entrepreneur and business support services (funds availability and business information). These conditions are described as factors that influence the enterprise establishment process which is discussed in the next section.

2.6 Factors influencing enterprise establishment process

These are factors that influence the various stages or activities of the enterprise establishment process or the entrepreneurial process. Among them are the type of enterprise (basic task identified by the entrepreneur), the expertise of the entrepreneur and the supportive business environment. These factors are discussed below.

2.6.1 Type of enterprise

Society’s needs are many and growing; while customers, employees, and new generations of young people are demanding that businesses play their role in contributing to meeting these needs. Enterprises for that matter must design the type products and services that meet the needs of the society. Type of enterprise refers to the basic societal need identified by the entrepreneur or the business unit. The enterprise
must attain a certain level of acceptance from the society and its stakeholders in order to make economic gain.

Aldrich and Fiol (1994), identified two forms of legitimacy; cognitive and socio political. Cognitive legitimacy refers to the acceptance of a new kind of venture as a taken for granted feature of the environment. The highest form of cognitive legitimacy exists when a new product, process, or service is accepted as part of the socio cultural and organizational landscape. When an activity becomes so familiar and well-known that people take it for granted, founders can conserve time by organizing resources, and their likelihood of success increases. From a producer’s point of view, cognitive legitimacy means that new entrants to an industry are likely to copy an existing organizational form, rather than experiment with a new one. From a consumer’s point of view, cognitive legitimacy means that people are committed users of the product or service. Cognitive legitimacy thus depends upon knowledge – in the form of routines, structures, products, and strategies – being acquired and then diffused. Sociopolitical legitimacy refers to the acceptance by key stakeholders, the general public, key opinion leaders, and government officials of a new venture as appropriate and right.

2.6.2 Supportive business environment

Business environment is defined as the world of opportunities and incentives available to all enterprises or firms as well as specific incentives or obstacles to growth (Nichter et al., 2005). According to Bull et al. (1995), the entrepreneur tends to utilize an infrastructure that is substantially developed by others. National and regional
governments have raced to introduce policies that facilitate business venturing and encourage entrepreneurial spirits of their people (Lu and Jao, 2010).

Nichter et al. (2005) stated that the overall state of the economy directly influences the availability of profitable business opportunities. According to them, this includes stable macroeconomic environment, the existence of mechanisms for contract enforcement and dispute resolution, an uninhibited flow of capital for foreign and domestic investment, supportive labour laws, access to information and investment in education and technology. Recently a number of developing countries have recently drafted SME legislation and launched programs to assist small businesses and domestic entrepreneurs (Acs et al., 2010). In Ghana, the establishment of the Export Development and Agricultural Investment Fund (EDAIF) by Act 823, the development of the Private Sector Development Strategy II and FINGAP policies and programs designed to create a supportive environment for the establishment and development of SMEs. These policies and programs are established to encourage individuals to establish enterprises.

According to Holcombe (2003) everyone has knowledge specific to their own activities, and the economy will be most productive when the economic system gives everyone an incentive to act on the specific knowledge they possess. He argued that entrepreneurs’ response to the availability of entrepreneurial opportunities and the more the opportunities available, the more alert entrepreneurs will be toward finding them. Entrepreneurs in any country or economic environment are affected by financial environment thus the availability and access to funds, business information, legal environment and other economic fundamentals including its macroeconomic stability,
infrastructure, and the level of development of its financial markets (Abor and Biekpe, 2006; Acs et al., 2010; Mullinex and Murinde, 2014). The next section discusses two main factors thus the financial environment and the business information environment which are within the scope of this study.

*Financial environment*

Mullinex et al., (2014) identified that the financial sector is the allocator of debt and equity finance and it is a key stakeholder in enterprise development. In most African economies, banks remain the major source of external capital for both large businesses as well as small enterprises, and indeed for the private sector and the economy as a whole. However, Nitcher and Goldmark (2010) noted that various reasons ranging from a lack of collateral to bias against small firms, MSEs tend to face greater financial constraints than do larger firms.

In Sub-Saharan Africa, most small businesses fail in their first year due to lack of support from government and traditional banks (Biekpe, 2004). In Nigeria for instance there has not been any significant contribution of government support towards developing SMEs (Ekwem, 2011). He further identified lack of finance by entrepreneurs as a factor leading to multiple problems and that the major sources of credit available for the financing of SMEs in Nigeria are personal savings, family/friend support and commercial banks.

Poor access to finance and other start-up capital necessary to support entrepreneurial activity is a challenge facing new entrepreneurs (Global Business School Network,
A study in Ghana revealed that there is a low level of awareness and usage of various financial initiatives among SMEs in the country (Abor and Biekpe, 2006). They explained that most of the financial schemes are perceived as difficult to access.

Robinson and Kolavalli (2010) identified that in an attempt by the government of Ghana to develop a linkage between agriculture and industry, and to improve on export earnings, the government has put in place certain incentive schemes to attract investors to go into agro-processing. These include a tax holiday for certain industries in the agriculture and agro-processing business, and lower taxes based on the location of the industry; with less tax for factories in the other regions and rural areas compared to Accra-Tema area.

**Business information**

Knowledge and information spill over will be particularly helpful where there are high transaction costs to discovery or large information asymmetries (Acs et al., 2003). According to Hausman and Rodrik (2003) knowledge is important in the product and production discovery process and there are also high costs to discovering what to produce and that these costs cannot be fully appropriated by an entrepreneur. These therefore require the engagement of governmental and non-governmental agencies in the provision of such knowledge and information.

A potential entrepreneur also observes the strategies and business operations of existing entrepreneurs and gathers information about potential markets, input suppliers, and production techniques (Acs et al., 2010). They added that, knowledge and information
externalities affect entrepreneurship in developing countries in two important ways: these externalities affect the ability of entrepreneurs to discover what to produce and they impact the technology and processes used in production.

### 2.6.3 Entrepreneur’s characteristics

The individual entrepreneur is the most important element in enterprise establishment. He/she recognized the opportunity, conceives the idea, seeks for the relevant information on the identified opportunity, learns skills and methods associated with the enterprise mobilize resources, select relevant strategies for the enterprise and comes out with a new combination (enterprise). Thus, the process of creating a new enterprise is inherently, an individual level phenomenon. Without the organization creation of individuals, there are no organizations (Acs et al, 2010).

The definition of the entrepreneur is a problem to research (Bruyat and Julien, 2000). However, they proposed that the works of Cantillon, Turgot, Say and Schumpeter have laid a foundation for today’s dominant positions concerning the entrepreneur. According to them, Cantillon defined the entrepreneur as someone who assumes the risk and may legitimately appropriate any profits; Turgot and Say said the entrepreneur is different from the capitalist, who assumes the risk or uncertainty- the entrepreneur obtains and organizes production factors to create value; and Schumpeter defines the entrepreneur as a person who performs the function of innovation that enables the liberal system to persist by going beyond its contradictions.
Looking at the economic perspective and from others’ perspective of the definition, they concluded that the entrepreneur is the individual responsible for the process of creating new value (an innovation and/or a new organization) - in other words, the individual without whom the new value would not be created. Based on the premise that the individual entrepreneur is responsible for the process he/she must have certain characteristics and skills to effectively undertake the process. These include the age, gender, educational level and previous occupation or organizational background of the entrepreneur and other characteristics. The next section discusses the expertise of the entrepreneur in relation to their educational background and previous work background.

**Expertise**

Bull et al. (1995) said new combination that causes discontinuity does not occur by chance but rather it is as the result of deliberate actions, the implementation of a plan, or the carrying out of a vision. This implies that an expertise is required for new combination to occur. Expertise of the entrepreneur can be due to educational background and the previous work background of the entrepreneur.

**Educational level and expertise**

The advancement of knowledge through education creates an environment in which entrepreneurial process can occur. According to Holcombe (2003), knowledge is necessary for the entrepreneur to recognize an entrepreneurial opportunity when one appears. He further stated that there is a direct connection between entrepreneurship and
knowledge since knowledge is a key ingredient in the production of entrepreneurial insights.

Innovative entrepreneurship requires a strong educational foundation (Acs et al., 2010). The level of education is an important element in entrepreneurship or enterprise establishment. However, studies which focus on education background of entrepreneurs have different findings. While some studies find a positive correlation between education level and self-employment decision (Uhlaner and Thurik 2004; Blanchflower, 2004), some studies find a negative correlation (Hessels et al., 2005). Uhlaner et al. (2004) showed that a higher level of education in a country is accompanied by a lower self-employment rate. Hessels et al. (2005) identified that highly educated people form a majority of those involved in early stage entrepreneurial activity in the Netherlands. Developing-country MSE owners and workers are relatively less educated than the majority of the population and they tend to have less-educated owners and workers than larger firms (World Bank, 2001). According to Global Business School Network (2013) poor education can lessen the employability of individuals, weaken their entrepreneurial skills and affect the performance of the enterprise.

**Previous work experience and expertise**

Entrepreneurs can gain both expertise and relationships necessary for success from previous work experience. According to Lu et al. (2010) most would-be entrepreneurs generally have had working experience in enterprises of varying degrees of state ownership or public organizations or government agencies.
Ardichvili et al. (2003) identified that three major dimensions of prior knowledge are important to the process of entrepreneurial discovery thus prior knowledge of markets, prior knowledge of ways to serve markets, and prior knowledge of customer problems. An empirically rigorous IDB study of high-growth entrepreneurs provides telling insights about the importance of skills gained during past employment (Kantis, Angellini and Koenig, 2004). Exploring small firms’ dynamism in four East Asian countries revealed that successful entrepreneurs benefited in particular from marketing, administration and negotiation skills developed in previous jobs.

According to Skutas et al. (2005) a comprehensive human capital is accumulated through knowledge acquired by work experience or by running another business. This according to them is referred to cognitive processes and the entrepreneur is an active and learning part of the process. Acs et al. (2010) identified that the human cognitive processes drive people to see things related to their existing knowledge. As a result, “creativity” is actually more about assembling prior knowledge in new ways than about dreaming up something totally new. Prior paradigms and problem-solving approaches thus constrain most innovative thinking, restricting potential variation in ideas. They further argued that with all the complexity, risks, and uncertainty related to the founding of a firm, the safest choice lies in imitating practices, products, and processes that have already proven successful. Also Hernández-Maestro, Muñoz-Gallego and Santos-Requejo (2009) identified that entrepreneur’s knowledge is a source of competitive advantage within the firm.
2.7 Indicators of enterprise growth

Enterprise growth is the development process of an enterprise from small to big and from weak to strong (Mao, 2009). According to Sun (2004) cited in Mao (2009) the meanings of enterprise growth is the development process that the enterprise keeps the tendencies of balanced and stable growth of total performance level (including output, sales volume, profit and gross asset) or keeps realizing the large enhancement of total performance and the stage spanning of development quality and level. Mao (2009) explained that the meaning of enterprise growth contains three connotations as follows;

i. The time property of enterprise growth: The premise to analyze the growth of enterprise is long period in which the long-term development tendency and process of enterprise are observed, and it is not the status of enterprise in certain time point.

ii. The dynamic property of enterprise growth: The growth of enterprise is not a stable process without troubles. In the growth process, enterprise always transits from balance to unbalance, and the result is to transit from unbalance to balance and from lower balance to higher balancer through unbalance.

iii. The enterprise growth is the unification of quantity and quality: The increase of quantity is embodied in the extension of enterprise scale such as the increases of sales volume, market share, production value, profit and employee. The growth of quality is embodied in the enhancement of enterprise quality, which includes the technological innovation ability from immature to mature production technology, the optimal efficiency of investment and output, the organizational innovation and reform.
Davidson, Delma and Wikland (2006) indicated that there are five types of indicators used in measuring enterprise growth. These are turnover or sales, employment, market share, multiple indicators performance and assets. Kruger (2004) classified the indicators of growth as quantitative and qualitative. Quantitative growth can be characterized (turnover, added value, volume) by the profitability of the company and the value of the company. Qualitative growth objectives are linked with quantitative growth objectives not as an aim in itself but a strategic means for the realization of the growth of the enterprise. These include the competitive position, quality and customer service.

Although there are many ways to measure growth Kim (2005) indicated that the three most important indicators for policy makers are employment growth, sales growth, and increase in profitability. Furthermore measuring business growth in terms of employment is directly linked to rural development objectives and relevant to policy decisions (Skutas et al., 2005). A growing company will almost always have to hire new personnel to meet the demands associated with new production, new marketing campaigns, new record keeping and administrative requirements among others.

Enterprise growth for the purpose of the study would be viewed as the unification of quantity and quality. Therefore three growth indicators would be measured thus employment growth, sales growth, and technological growth. Employment growth would be measured by the average increase of the number of staff in the last three years and sales growth would be measured by asking the respondent to assess the average
increase of sales volume in recent three years. Technological growth would be measured by the use of manual or mechanical method of carrying out activity to meet basic needs of customers. It is therefore important to establish a relationship between the enterprise establishment factors and the various enterprise growth indicators. The next section reviewed relevant literature on this subject matter.

2.8 Enterprise establishment factors and enterprise growth

This section discusses relevant literature on the contribution of enterprise establishment factors to the growth of enterprises. The section is sub divided into the following sub headings;

- Type of enterprise and enterprise growth
- Customer needs that products meet and enterprise growth
- Financial environment and enterprise growth
- Business information and enterprise growth
- Expertise and enterprise growth

2.8.1 Type of enterprise and enterprise growth

Tushabowe-Kazooba (2006) identified that business start-up factors posed a greater threat than those that are encountered once the business has been established. As such, business people who successfully negotiate the initial start-up hurdles have greater chances of future success in their business. This implies that if entrepreneurs are able to identify the type of product or services that the society needs it would influence its growth and existence. The identification of basic need is one crucial hurdle that entrepreneurs must cross to enable them to stay in business. The products or services
must be relevant to the customer (members of the society) and have the ability to solve a particular problem which the customer is willing to exchange with value.

Strotmann (2007), investigating entrepreneurial survival of German manufacturing enterprises indicated that besides start up size the type of establishment might also influence its survival probability. Empirical studies by Philip (2010), into the factors affecting business success of SMEs in Bangladesh identified that the characteristics of SMEs, have no significant effect on business success. Employment is generated when new products and services are identified to serve customers. In the agricultural sector the various activities in the value chain provides an opportunity for establishment of various enterprises. Analyzing the agricultural value chain in sub-Saharan Africa, Schaffnit-Chatterjee (2014) identified that increased activity in the value chain especially in the processing of raw produce would lead to increase in employment.

Technological usage of enterprises varies due to the differences in products produced and their means of production. Technology enhances production and leads to the efficient use of resources in the agricultural sector. However, Dennis, Aguilera and Satin (2010) identified that technologies are not applied in isolation, but require commitment and investment from the private sector in a political environment where public policies stimulate entrepreneurship. This involves the availability of an appropriately educated and trained workforce, fiscal incentives for R&D and innovation and international regulations that are not unnecessary barriers to trade.
2.8.2 Customer needs and enterprise growth

Hayes (2014) stated that to have a growing business (example; improve profit, maximize lifetime value of customers), you need to have customers who engage in three different types of loyalty behaviours. Investigating the top drivers of customer loyalty of “typical” B2B technology companies, the findings of the study revealed that gaining new customers, expanding existing relationships and keeping customers around for the long-haul each require different efforts. He explained that to gain new customers, you need to make a solid product and make it easy to do business with you. To improve your up-selling and cross-selling capabilities, you need to know where you are headed and communicate that path effectively to your customers.

2.8.3 Financial environment and enterprise growth

Nichter and Goldmark (2005) found out that the business environment had different levels of relationship between micro and small enterprise growth and the overall business. In addition they also found out that regulatory obstacles represent a disproportionate burden for smaller firms. In Iran, studies show that financial support of the government can be helpful in the growth of SMEs, only in the case that there is programming in specific frameworks (Afshari, Ardabili and Ali, 2012). They found out that incentives and discounts propriety with growth were the major determinants of the SMEs growth and had significant relation with all the SMEs growth indexes (sales, personal growth, variety of products and activity background).

Iacovone, Ramachandran and Schmidt (2013) measuring business environment variables on firm size of African firms identified that access to finance and access to
land are significant and positively correlated with firm size. The results according to Iacovone et al. (2013), pointed out that there are constraints imposed by the business environment and by firm and market characteristics that limit the growth of African firms.

Nganda, Wanyonyi and Kitili (2014), investigating the determinants of SMEs growth in Kakamega, Central Sub-county in Kenya found out that financial factors thus financial base of business, borrowing from financial institutions, investments in the business, financial knowledge of the owner and the employee, and access to micro credit facilities have a marginal weak association with the growth of SMEs. Also in a study of manufacturing SMEs in the Ho municipality of Ghana, Ahiawodzi et al. (2012) showed that access to credit exerts significant positive effect on growth of manufacturing SMEs.

Literature reviewed on the influence of access and availability of funds for enterprises on enterprise growth shows that there is a strong link that exists between them. However, the link is affected by policies and programs of a particular country, the firm and market characteristics.

2.8.4 Business information and enterprise growth

A study by Bunyasi et al. (2014) found out that access to business information had a significant effect on the growth of SMEs. Investigating the factors that influence the growth of dairy business, Muriithi, Huka and Njati (2014) established that interaction with extension service providers positively impacted on the earnings of the dairy
farmers. Literature reviewed shows that business information has a relationship with the growth of enterprises.

2.8.5 Expertise from educational background and enterprise growth

There is no clarity in the relationship that exists between educational level and growth of the enterprise by researchers. While some report positive impact of education on enterprise growth, others found negative or no significant effect of education on enterprise growth. “For example, an IDB study found that secondary school attainment had no discernible impact on firm growth in Latin America (Kantis, Angellini, and Koenig, 2004). On the other hand, GEMINI studies in Sub-Saharan Africa revealed that entrepreneurs completing secondary school were more likely to grow in Kenya and Zimbabwe, but found no significant effect of primary education on MSE expansion (cf Mead and Liedholm, 1998; Parker, 1995; McPherson, 1992).

An empirical study found no positive association between growth in education and growth in output per worker (Pritchett, 2001). Skuras et al. (2005) identified that human capital accumulation processes related to education and training or to work and managerial experience still play the prime role in predicting successful business. They added that education and training are significant entrepreneurial variables related to knowledge, skills, motivation, self-confidence and the ability to provide solutions to short- and long-term business planning issues

Nitcher and Goldmark. (2005) however found out that more education correlates with MSE growth above a country-specific threshold. They explained that higher education
can expand an entrepreneur’s opportunity set but ironically might hinder the growth of his or her MSE.

2.8.6 Expertise from previous work experience and enterprise growth

Experience gained on the job or through prior employment is a critical growth factor (Nitcher and Goldmark, 2005). Work experience proves to be highly important for developing capabilities within MSEs, as entrepreneurs with more years of work experience typically have faster growing MSEs. For example, one empirical study found that Kenyan entrepreneurs with at least seven years work experience expanded their firms more rapidly than those without such experience (Mead and Liedholm, 1998; Parker, 1995).

Nitcher and Goldmark (2010) exploring small firms’ dynamism in four East Asian countries revealed that successful entrepreneurs benefited in particular from marketing, administration and negotiation skills developed in previous jobs. The review indicated that entrepreneurs acquire skills from their previous jobs or organizations that affect the growth of their firms.

2.10 Definition of concepts

This section defines the various concepts used in the study. These include enterprise establishment factors and enterprise growth.
2.10.1 Enterprise establishment factors

Enterprise establishment factors are elements in the social and business environment that contribute or influence the establishment of an enterprise. Factors considered in this study are derived from the discontinuity theory of enterprise establishment and the theory of previous organization origin. They are the characteristics of the enterprise (enterprise characteristics), funds availability, business information and the entrepreneur’s expertise.

- **Enterprise characteristics:** This represents the nature of the enterprise. It includes the type of enterprise (production/processing agro enterprise), and customer needs that products meet. The customer needs that products meet identified by the entrepreneur are classified as consumption need and raw material needs. The nature of the enterprise is also referred to as the basic tasks identified by the entrepreneur.

- **Funds availability for enterprise establishment:** This refers to the knowledge of funding available from government institutions and other organizations for entrepreneurs to access to establish enterprises.

- **Business information:** This refers to the information received by the entrepreneur in relation to his/her business activity. Business information is categorised into access to business information and business information sources.

- **Entrepreneur’s expertise:** Entrepreneur’s expertise refers to the skills and capabilities that entrepreneurs acquire due to their educational and previous
work backgrounds before the establishment of the enterprise. In this study entrepreneur’s expertise is categorized into entrepreneur’s expertise from educational background, and entrepreneur’s expertise from previous work background.

- Entrepreneur’s expertise from educational background is skills and capabilities acquired by entrepreneurs from their educational background.
- Entrepreneur’s expertise from previous work background is skills and capabilities acquired by entrepreneurs from their previous work background.

2.10.2 Enterprise growth

Enterprise growth is defined as the scale extension in the number of employees, sales volume, and improvement in technology. These are employment growth, sales growth, and technological growth.

- **Employment growth:** Employment growth is defined as the change in the number of employees within a period of time.
- **Sales growth:** Sales growth is defined as change in sales volume of product for a period of time.
- **Technological growth:** Technological growth is defined as the advancement or improvement in technological usage from “manual” technology to “mechanical” technology within a period of time.
2.11 Importance of SMEs to national development

Entrepreneurship is indispensable for economic progress, but entrepreneurial activity is possible only when profit opportunities are available to the entrepreneur (Holcombe, 2003). It has been recognized as one of the driving forces for market competitiveness and economic growth in the emerging economies (Lu et al., 2010). The formation of SMEs by the entrepreneur is important in various aspect of the economy including employment generation and poverty reduction.

2.11.1 Employment

Available data from some African countries show that in 2003 SMEs in Kenya employed 3.2 million people and accounted for 18% of the national GDP. In Nigeria, SMEs account for 95 percent of formal manufacturing activity and 70 percent of industrial jobs. In South Africa micro and small firms provided more than 55 percent of total employment and 22 percent of GDP in 2003 (OECD, 2005). SMEs provide about 85% of manufacturing employment and contribute about 70% of Ghana’s GDP (Villars, 2004). On the average SMEs represent over 90% of the enterprises and account for 50 to 60% of employment in most African countries (Ahiawodzi et al., 2012). SMEs are therefore regarded as the catalyst for economic growth, income, and employment generation.

2.11.2 Poverty reduction

The SMEs sector that is very important and relevant to the development of Africa’s economy is agro enterprises. Jaffee et al. (2003) identified that the promotion of agro-enterprise development can provide a catalytic force in poverty reduction in Africa,
both directly and indirectly by: (i) reducing food costs and supply uncertainties and improving the diets of the rural and urban poor; (ii) generating growth, increasing and diversifying incomes, and providing widespread employment and entrepreneurial opportunities in both rural and urban areas; and (iii) inducing productivity gains by smallholder farmers and better integrating them into local, national, and international markets.

Examining the impact of SMEs in economic growth and poverty alleviation, Gebremariam, Gebremedhin, and Jackson (2004) found that there is a strong relationship between SMEs, economic growth and poverty reduction. They further showed that an increase in the percentage share of SMEs’ employment had a positive impact on economic growth, thereby reducing poverty. Furthermore, in agriculture-based economies, SMEs provide livelihood opportunities and nurture entrepreneurship.

2.12 Government policies on SMEs in Ghana

Governments in both developed and developing countries in order to enhance the establishment and development of small and medium enterprises develop policies and programme to meet the needs of these SMEs. The establishment of the National Board for Small Scale Industry (NBSSI) by Act 434 of 1981 by the government of Ghana as an apex governmental body for the promotion and development of micro and small enterprises in the country is one of such agencies. This governmental agency has been established with the vision of promoting, growing and developing the micro and small enterprise (MSEs) sector towards employment generation and wealth creation.
To achieve this objective the agency has established ten (10) regional secretariats to supervise the projects unit and Business Advisory Centres (BACs) established in the various districts. The Business Advisory Centres (BACs) are established in the districts to provide the following services;

- Provide an enabling environment for Micro and small scale enterprise development and growth
- Provide high quality business development services
- Deepen the development of an enterprise culture
- Provide advisory and counselling services
- Facilitate access to credit
- Promote group formation and develop sector associations

The Board of NBSSI has established the credit and project unit which is responsible for the financial services offered by the Board. Its functions include management of loan schemes for the growth of Micro and Small Enterprise (MSEs), supporting MSEs to prepare business plans and facilitation of MSEs to access formal loans from financial institutions. The Board has four (4) operational departments namely; the policy planning, monitoring and evaluation, the entrepreneurship development department, the investment and credit department and the women entrepreneurship development department.

The Government of Ghana through the Ministry of Trade and Industry has established the Export Development and Agricultural Investment Fund. The fund established by Act 823 dated 25th October, 2011 was an amendment of Act 582 dated 4th October,
2000 which established the Export Development Investment Fund (EDIF). The amended fund EDAIF was established to include the provision of agriculture and agro processing development facility (the Agriculture Grant Facility) to support activities, persons, groups and institutions in the development and promotion of agriculture and agro processing products, and provision of services to the agriculture and agro processing sector. The activities financed under the Agriculture Development facility include:

- Product development and promotion
- Capacity building and research
- Development of infrastructure and common user facilities for agriculture relating to agro processing and agro processing industry,
- Development and promotion of other agricultural and agro processing entrepreneurial activities and
- Agriculture and agri-business trade oriented activities of both public and private institutions.

Included in this fund is the agriculture and agro processing credit facility (the Agriculture Credit Facility) which is open to persons in the agriculture sector to access for loans for financing agricultural activities relating to agro processing. The fund is open to enterprises that are wholly owned by Ghanaians or partly owned but with Ghanaian majority shareholding.

The review indicated that there are several agencies, policies and programme available for individuals and companies to access business support services and financial support. Although these agencies, policies and programmes are available
research has indicated that entrepreneurs are not able to access them for enterprise establishment and growth. Most of these policies and programmes have been established to meet the needs of already existing enterprises with little concentration on would be enterprises. Thus, funds are not made available by programmes for entrepreneurs to enable the establishment of enterprises.

The agro enterprise sector is made up different sub sectors or industries. There is therefore the need to understand the sub sector or industry that is under study. The next section discussed the pineapple industry in Ghana to enhance this understanding.

2.13 Pineapple industry in Ghana

In recent years, pineapple has become one of Ghana’s specialty products and the sector’s growth has been driven principally by innovative entrepreneurs in the private sector (Danielou and Ravry, 2005). The two principal production areas for pineapple are Nsawam in the Eastern Region and Bawjiase in the Central Region (Suzuki, Jarvis and Sexton, 2008) and other areas are located in the Greater Accra and the Volta Region (Kleemann, 2011). Suzuki et al (2008) explained that the production of pineapples for export started in Nsawam around 1945 in the village of Samsam-Odumase when a farmer named Mr. Oko brought suckers from the Aburi Botanical Garden and planted in the village. Its production then spread among villagers in the area, particularly after the Nsawam Cannery was established by Dr. Kwame Nkrumah, to boost the economy after Ghana’s independence in 1957. Export of pineapple from Ghana to Europe in very
small quantities began at the end of the 1980s and the first companies to export were Combined farms and Koranco farms (Danielou et al., 2005; Kleemann, 2011).

In most pineapple production areas, within the households, the women usually produce staple crops while the men are engaged in pineapple production on different plots (Goldstein and Udry, 1999). Production of pineapple is associated with more intensive use of hired labour with the purchase of new inputs and with entirely new output marketing system tightly linked to consumer markets in Europe.

Individuals and companies in the pineapple industry in Ghana operate at different stages of the value chain; some are producers, processors and exporters. The production of small scale and family producers in the industry is absorbed by the local market and by processors and exporters who turn to them whenever they need to increase their production volumes (Danielou et al., 2005). The shift to the MD2 variety from Smooth Cayene (SC) variety has driven a lot of farmers, in particular small holder-based cooperatives, out of the export market due to initially high costs of investment into the new variety and prevalent contract breaching from both sides during the breakdown of pineapple exports (Kleemann, 2011). In Ghana, majority of the pineapple exporters and processors are medium-sized to large companies either established by local entrepreneurs or through joint ventures with British, Lebanese, and Dutch partners. Among these companies, we find Blue Sky Products (GH) Ltd., Jei River, John Lawrence Farms, Korenco Farms, Milani Ltd., Prudent Exports, Tack Farms, and Tongu Fruits (Danielou et al., 2005).
The growth of the industry has led to the aggregation of small scale producers into various producers’ cooperatives which enable a producer to take advantage of opportunities of market and information. There are formal mechanisms through which information is shared by pineapple farmers thus extension workers, farmer cooperatives, and crop exporters (Goldstein et al., 1999). The information they receive enable these small scale producers to meet standards and quality demanded by the export market. However during the shift to the new MD2 variety many smallholders have lost, and up to today not regained, their access to the export market (Kleemann, 2011).

2.14 Summary

The chapter reviewed literature on the concept of enterprise establishment process, the theories of enterprise establishment underpinning the study, the factors associated with enterprise establishment and enterprise growth. The relationship between the enterprise establishment factors and enterprise was also reviewed. The conceptual framework of the study was illustrated with the definition of concepts used in the study. The chapter ended with a discussion on the importance of SMEs to national development, government policies on SMEs in Ghana and the pineapple industry in Ghana.
CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This section outlines the research design explored for the study, the sampling size and techniques used questionnaire design, questionnaire pre-testing and administration, and field data collection. Measurement of some of the key variables thus enterprise growth (employment growth, sales growth, and technological growth); educational background and expertise; previous work background and expertise are discussed in this section.

3.1 Research Design

Research design refers to the plan of action that links the philosophical assumptions to specific methods (Creswell, 2003; Johnson and Christensen, 2007). Research design includes experimental design, cross-sectional design, longitudinal design, case study design and comparative design (Bryman, 2012).

According to Johnson and Christensen (2007) there are three research methods to investigate research problems. These are quantitative research, qualitative research and mixed method research. Quantitative research relies on the collection of quantitative data (i.e. numerical data) and qualitative research relies on the collection of qualitative data (i.e. non numerical data such as words and pictures). Mixed method research involves a combination of quantitative and qualitative research methods, approaches or other paradigm characteristics.
A mixed method research was used in this study with the collection of both quantitative and qualitative data. A survey was conducted with the use of questionnaire that composed of multiple closed or quantitative type items as well as several open ended or qualitative type items (Appendix I). The central premise of the design used is that the combine approach helps to provide a better understanding of research problems than either approach alone (Creswell, 2006). In addition, both qualitative and quantitative information was collected so that each supplemented the other to minimize subjectivity and enhance objectivity.

3.2 Population

The target population for the study was all the individual entrepreneurs in the production and processing of pineapple in the Nsawam-Adoagyiri District of the Eastern Region of Ghana. These include pineapple producers and processors in the study area.

3.3 Sample size and Sampling technique

Sampling helps the researcher to study a relatively smaller number of units of the population and to obtain data representative of the whole target population. Sampling is thus, the process of choosing the research units of the target population which are to be included in the study (Sarantakos, 1993). Purposive sampling technique was employed to select agro enterprises in pineapple production and processing in the Nsawam-Adoagyiri District in the Eastern Region of Ghana. The area was selected because it has the largest producers of pineapple in the country.
Simple random sampling technique was used to select the pineapple producers and processors from eight (8) farmer based organizations (Appendix II, pg 114). A simple random sampling technique was employed to obtain a representative sample for the study. For the purpose of the study, Ghanaian owned agro enterprises were selected. A sample size of 172 entrepreneurs in the pineapple production and processing industry was selected for interview in the Nsawam-Adoagyiri District in the Eastern Region of Ghana.

3.4 Questionnaire Design

A questionnaire was designed for the collection of data. Data was collected on the characteristics of the agro enterprise (basic tasks identified by the entrepreneur), funds availability for enterprise establishment, business information and entrepreneur’s expertise from both his/her educational background and the previous organizational background. Data was also collected on indicators of enterprise growth (employment growth, sales growth and technological growth).

3.5 Questionnaire Pre-testing and Administration

Pre-testing of the questionnaire was conducted at Adwaso in Akuapim South District of the Eastern Region to ascertain the relevance of the questions to the respondents and to check whether the key variables from the objectives were arrived at for analysis. After the pre-testing the questionnaire was restructured to suite the time for the interview. The responses were changed accordingly to enhance easy understanding in the local language and the analysis of data.
3.6 Field Data collection

Field data was collected by conducting a face to face interview for the respondents. This method of data collection has the advantage of providing in depth data that is both qualitative and quantitative. Responses from the interview were critically recorded in order to provide explanation to answers given by the respondents.

3.7 Methods and Instrumentation

This section enumerates how the data was collected, the type of data collected and how the data collected was analyzed. It is subdivided in the four objectives of the study.

3.7.1 Objective one

To determine the contribution of enterprise characteristics to the growth of the pineapple industry in the Nsawam-Adoagyiri District.

Methods and instruments

Structured questionnaires, thus closed and open (Appendix I) were administered to pineapple producers and processors to obtain specific information.

Data collection and analysis

Data were collected on enterprise characteristics. Enterprise characteristics include type of agro enterprise, and customer needs that products meet (Appendix I). Data was also collected on the three indicators of enterprise growth for the past three years (2011-2013), thus employment growth, sales growth, and technological growth. Data collected were analyzed using Chi square analysis to determine the significant relationship and
the differences in enterprise characteristics and the three indicators of growth with the computer package SPSS for windows, version 20.0.

3.7.2 Objective two

To examine the contribution of funds availability for enterprise establishment to the growth of the pineapple industry in the Nsawam – Adoagyiri District.

Methods and instruments

Structured questionnaires, thus closed and open (Appendix I) were administered to pineapple producers and processors to obtain specific information.

Data collection and analysis

Data were collected on funds availability for agro enterprise establishment (Appendix I). Data was also collected on the three indicators of enterprise growth for the past three years (2011 - 2013), thus employment growth, sales growth, and technological growth. The data collected were analyzed using Chi square analysis to determine the significant relationship between funds availability for enterprise establishment and the three indicators of growth with the computer package SPSS for windows, version 20.0.

3.7.3 Objective three

To determine the contribution of business information to the growth of the pineapple industry in the Nsawam – Adoagyiri District.
Methods and instruments

Structured questionnaires, thus closed and open (Appendix I) were administered to pineapple producers and processors to obtain specific information.

Data collection and analysis

Data were collected on business information thus access to business information and business information sources (Appendix I). Data was also collected on the three indicators of enterprise growth for the past three years (2011 - 2013), thus employment growth, sales growth and technological growth. The data collected was analyzed using Chi square analysis to determine the significant relationship between variables of business information and the three indicators of growth with the computer package SPSS for windows, version 20.0.

3.7.4 Objective four

To investigate the contribution of entrepreneur’s expertise to the growth of the pineapple industry in the Nsawam-Adoagyiri District.

Methods and instruments

Structured questionnaires, thus closed and open (Appendix I) were administered to pineapple producers and processors to obtain specific information.

Data collection and analysis

Data were collected on the educational background of the entrepreneur before establishment of the enterprise, entrepreneur’s expertise from educational background, the previous work background of the entrepreneur, and entrepreneur’s expertise
acquired from previous work background (Appendix I). Data was also collected on the three indicators of enterprise growth for the past three years (2011 - 2013), thus employment growth, sales growth, and technological growth. The data collected were analyzed using Chi square analysis to determine the significant relationship and the differences in entrepreneur’s expertise and the three indicators of growth with the computer package SPSS for windows, version 20.0.

3.8 Measurement of variables

This section provides insight into how some of the variables were measured to enable the analysis of the data. These variables include enterprise growth (employment growth, sales growth, and technological growth); entrepreneur’s expertise from educational background and entrepreneur’s expertise from previous work background.

3.8.1 Measurement of enterprise growth

Enterprise growth for the purpose of this research is described as a change in the number of employees, sales volume, and technology within a three (3) year period thus from 2011 to 2013. The growth of the enterprise is a scale extension and it is both quantitative and qualitative. The quantitative growth includes the change in number of employees and sales volume. Qualitative growth include the change in technology from “manual to mechanical” or from “mechanical to manual”.

Employment growth was assessed by asking the respondents (the entrepreneurs) to indicate the number of employees of the agro enterprise within the past three years (2011; 2012; and 2013). It was calculated by deducting the number of employees in the
year 2011 from the number of employees in the year 2013. Increasing number of employees is categorized as positive growth, decreasing number of employees is termed as negative growth and no change in the number of employee is classified as no change or no growth.

Sales growth was measured by collecting data on the sales volume of the respondents within the past three years (2011; 2012; and 2013). It was computed by deducting the sales volume in the year 2011 from the sales volume in the year 2013. Increasing trend in sales volume is termed a positive growth; decreasing trend in sales volume is categorized as negative growth; and zero sales volume is termed no change or no growth.

Technological growth was defined as the advancement in technology in the use of manual or mechanical means of production. Technological growth is classified as a positive growth when technology usage changed from “manual to mechanical”; it is classified as negative growth when technology usage changed from “mechanical to manual”; and no growth or no change when there is no change in either “manual or mechanical” usage of technology.

3.8.2 Measurement of expertise from educational background

Literature reveals that the educational background of individuals affects their expertise in the execution of business activities. Entrepreneur’s educational background was categorized into no formal education; primary school education; JSS/Middle school education; senior secondary school education and tertiary education. Entrepreneurs
were asked to indicate whether they obtained any skills from their educational background which enables them in the establishment and management of the agro enterprise. Skills from educational background were categorized into expertise and no expertise. Expertise refers to entrepreneur’s who acquired skills from their educational background and no expertise refers to entrepreneur’s who do not acquire any skills from their educational background.

3.8.3 Measurement of expertise from previous work background

Entrepreneurs interviewed were requested to indicate whether they had a previous work background before the establishment of the agro enterprise. They were also required to specify whether they acquired any skills or expertise from their previous work background that helped them in the establishment and management of the agro enterprise. The entrepreneur’s expertise from previous work background is categorized into expertise and no expertise. Expertise refers to entrepreneurs who have acquired skills from their previous work background for the establishment and management of the enterprise and no expertise refers to those who have not acquired any skills from previous work background.

3.9 Summary

The chapter dealt with the research methodology of the study; the research design, the study area, the population, sample size and sampling methods, data collection tools and the measurement of some of the key variables of the study. A mixed method research was used in this study with the collection of both quantitative and qualitative data. Purposive sampling method was employed to select the study area and simple random
sampling method was employed to select respondents from eight (8) farmer based
organizations in the Nsawam-Adiagyiri District in the Eastern region. A total of 172
entrepreneurs made up of both producers and processors of pineapple were selected.

A structured questionnaire with ‘closed and open’ items was formulated for data
collection. Data analysis was carried out using cross tabulation under descriptive and
statistical tools to determine the contribution of enterprise establishment factors to the
growth of agro enterprises with the computer package SPSS for windows, version 20.0.
The chapter ends with an insight into how some of the key variables (enterprise growth
and entrepreneur’s expertise) were measured to enable the analysis of the data.
CHAPTER FOUR

RESULTS AND DISCUSSION

4.0 Introduction

With reference to the objectives of this study, this chapter examines the findings and
discusses the data collected on enterprise establishment factors and enterprise growth.
Both qualitative and quantitative data analysis was employed. The quantitative data was
supported with narratives from respondents. The results are analyzed and discussed in
four sections;

- The contribution of enterprise characteristics to the growth of the pineapple
  industry.
- The contribution of funds availability for enterprise establishment to the growth
  of the pineapple industry.
- The contribution of business information to the growth of the pineapple
  industry.
- The contribution of expertise of the entrepreneur to the growth of the pineapple
  industry.

4.1 The contribution of enterprise characteristics to the growth of the
pineapple industry

The result and discussions on the contribution of enterprise characteristics to the growth
of the pineapple industry was discussed under the following sub headings;

- The contribution of enterprise characteristics to employment growth of agro
  enterprises.
• The contribution of enterprise characteristics to the sales growth of agro enterprises.

• The contribution of enterprise characteristics to the technological growth of agro enterprises.

4.1.1 The contribution of enterprise characteristics to employment growth of the pineapple industry

This section investigates the contribution of enterprise characteristics to the employment growth of the pineapple industry. It is divided into the following sections:

• The contribution of type of agro enterprise to employment growth.

• The contribution of the customer needs that products meet to employment growth.

The contribution of type of agro enterprise to employment growth

A Chi-square test was performed to examine the relationship between the types of agro enterprise and employment growth. With reference to Table 1 the relationship between these variables was significant, ($\chi^2 = 47.60; df= 1; p = 0.00$).

<table>
<thead>
<tr>
<th>Type of Agro enterprise</th>
<th>Employment growth</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No Change</td>
<td>Positive growth</td>
</tr>
<tr>
<td>Pineapple producing enterprise</td>
<td>154(96.3%)</td>
<td>6(3.7%)</td>
</tr>
<tr>
<td>Pineapple processing enterprise</td>
<td>5(41.7%)</td>
<td>7(58.3%)</td>
</tr>
<tr>
<td>Total</td>
<td>159(92.4%)</td>
<td>13(7.6%)</td>
</tr>
</tbody>
</table>

Source: Field Survey, 2014. ($\chi^2 = 47.60; p value = 0.00; df = 1 and p <0.050$)
This means that the pineapple processing enterprises are more likely to demonstrate positive employment growth than the pineapple producing enterprises. It is interesting to note that, higher proportion (58.3%) of the pineapple processing enterprises are likely to obtain positive employment growth as compared to lower proportion (3.7%) pineapple producing enterprises. This result agrees with Schaffnit-Chatterjee (2014) who identified that increased activity in the value chain especially in the processing of raw produce would lead to increase employment. The positive employment growth of the pineapple processing enterprises may be due to increase in processing of produce to market which requires the employment of more individuals to carry out the activities. The pineapple processing enterprises also indicated that they have the capacity in terms of finance and machinery to increase processing activities.

This is shown in the following narratives by entrepreneurs of agro processing enterprises;

“I have just bought a new machine for juice extraction and I need to add two people to my work force” (Pineapple processor from Nsawam).

“You need to do a lot of activities when you are processing. You need people to off load the pineapples, operate the machines, bottle the drinks etc. So you see I need more people to help me” (Pineapple processor from Adoagyiri).

The above narratives which are typical of most pineapple processors show that entrepreneurs in agro processing enterprises employ additional workers due to the acquisition of new equipment, and the enormous activities involved in the enterprise. The pineapple producing enterprises recorded less employment growth because many of the entrepreneurs may not have the capacity in terms of finance and machinery to
expand production and so employ more workers. The following narratives are examples typical of how some entrepreneurs of pineapple producing enterprise expressed their concerns:

“Formally I have permanent worker on my field but now I have none because I do not have the money and machinery to expand my farm” (Pineapple producer from Fotobi).

“I am the only one working on my farm due to money problems” (Pineapple producer from Pokrom).

It can be deduced from the above statements from entrepreneurs of pineapple producing enterprises that financial reason is the main reason for not employing people to work on their field. This affects the number of people they employ hence employment growth.

**The contribution of customer needs to employment growth**

With reference to Table 2, the Chi square result shows that the relationship between customer needs and employment growth was significant, ($\chi^2 = 10.56; \text{df} = 1; p = 0.01$). The result indicates that pineapple enterprises that supply products for consumption needs are likely to experience more positive employment growth than pineapple enterprises that supply products for raw material needs.

**Table 2: The contribution of customer needs to employment growth**

<table>
<thead>
<tr>
<th>Customers needs</th>
<th>Employment growth</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No Change</td>
<td>Positive growth</td>
</tr>
<tr>
<td>Consumption need</td>
<td>42 (82.4%)</td>
<td>9 (17.6%)</td>
</tr>
<tr>
<td>Raw material need</td>
<td>117 (96.7%)</td>
<td>4 (3.3%)</td>
</tr>
<tr>
<td>Total</td>
<td>159 (92.4%)</td>
<td>13 (7.6%)</td>
</tr>
</tbody>
</table>

Source: Field Survey, 2014. ($\chi^2 = 10.56; \text{p value} = 0.01; \text{df} = 1$ and $p < 0.050$)
Thus the satisfaction of the consumption need of customers will promote employment growth of the pineapple enterprise rather than the satisfaction of the raw material need of processors which is largely undertaken by the pineapple producing enterprises. According to Aldrich et al. (1994) from a consumer’s point of view, cognitive legitimacy means that people are committed users of the product or service. It can therefore be explained that home consumers are committed to the use of the products thereby encouraging the production of more produce which will require more labour.

4.1.2 The contribution of enterprise characteristics to sales growth

This section examines the contribution of enterprise characteristics to the sales growth of the pineapple industry. It is divided into the following sections;

- The contribution of the type of agro enterprise to sales growth
- The contribution of customer needs to sales growth

The contribution of the type of agro enterprise to sales growth of the pineapple industry

With reference to Table 3, the Chi square result shows that the relationship type of agro enterprise and sales growth was not significant, ($\chi^2 = 4.13; df= 1; p = 0.127$). The result means that there is not much difference in the sales growth of pineapple producing enterprises and pineapple processing enterprises. This is how some entrepreneurs of pineapple processing enterprise explained why sales volume did not change from the year 2011 to 2013;

“The use of “used bottles” for packaging affected our supply to the market because people criticises our packaging systems” (Pineapple processor from Nsawam).
“I am not able to make much sales due to low demand for fruit juice” (Pineapple processor from Adoagryiri).

“People said my fresh fruit juice was expensive so I did not sell much” (Pineapple processor from Nsawam).

The demand for products, the cost of product, and the packaging of products affected sales of products as deduced from their statements from the field, although pineapple processing enterprises employ more people due to the numerous processing activities.

Table 3: The contribution of the type of pineapple enterprise to sales growth

<table>
<thead>
<tr>
<th>Type of pineapple enterprise</th>
<th>Sales growth</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No change</td>
<td>Positive growth</td>
</tr>
<tr>
<td>Pineapple producing enterprise</td>
<td>13(8.1%)</td>
<td>112(70.0%)</td>
</tr>
<tr>
<td>Pineapple processing enterprise</td>
<td>2(16.7%)</td>
<td>5(41.7%)</td>
</tr>
<tr>
<td>Total</td>
<td>15(8.7%)</td>
<td>117(68.0%)</td>
</tr>
</tbody>
</table>

Source: Field Survey, 2014. ($\chi^2 = 4.13; p$ value $= 0.127; df = 1$ and $p > 0.050)$

The result agrees with Philip (2010) who identified that the characteristics of enterprises have no significant effect on business success. Possible explanation may also be that most of the pineapple enterprises have their well defined markets, thus most producers sell to processors whiles the processors supply to home consumers.

The contribution of customer needs to sales growth

This section investigates the contribution of customer needs that products meet to the sales growth of the agro enterprises. Result of the Chi square tests from Table 4 shows that the relationship between the two variables was not significant, ($\chi^2 = 0.24; df = 1; p = 0.89$).
Table 4: The contribution of customer needs to sales growth

<table>
<thead>
<tr>
<th>Customer needs</th>
<th>No change</th>
<th>Positive growth</th>
<th>Negative growth</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumption need</td>
<td>4(7.8%)</td>
<td>34(68.7%)</td>
<td>13(25.5%)</td>
<td>51(100.0%)</td>
</tr>
<tr>
<td>Raw material need</td>
<td>11(9.1%)</td>
<td>83(68.6%)</td>
<td>27(22.3%)</td>
<td>121(100.0%)</td>
</tr>
<tr>
<td>Total</td>
<td>15(8.7%)</td>
<td>117(68%)</td>
<td>40(23.3%)</td>
<td>172(100.0%)</td>
</tr>
</tbody>
</table>

Source: Field Survey, 2014. ($\chi^2 = 0.24; p$ value = 0.89; df = 2 and p >0.050)

This means that there is no difference in the sales growth of agro enterprises that supply products to meet the consumption needs of home consumers and agro enterprises that supply to meet the raw material needs of processors. This is clearly shown by the equal proportion of positive growth and the near equal proportion of negative growth and no change in growth obtained by both consumption needs and raw material needs.

4.1.3 The contribution of enterprise characteristics to technological growth

This section analyzes the contribution of enterprise characteristics to the technological growth of the pineapple enterprises. It is divided into the following sections;

- The contribution of the type of pineapple enterprise to technological growth
- The contribution of customer needs to technological growth

*The contribution of the type of pineapple enterprise to technological growth*

The result of the Chi square from Table 5 shows that the relationship between type of pineapple enterprise and technological growth was not significant, ($\chi^2 = 1.89; df= 2; p = 0.39$). This indicates that there is no difference in the technological growth of production and agro processing enterprises.
Table 5: The contribution of the type of pineapple enterprise to technological growth

<table>
<thead>
<tr>
<th>Type of pineapple enterprise</th>
<th>Technological growth</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No change</td>
<td>Positive growth</td>
</tr>
<tr>
<td>Pineapple producing enterprise</td>
<td>138 (86.3%)</td>
<td>13 (8.1%)</td>
</tr>
<tr>
<td>Pineapple processing enterprise</td>
<td>12 (100.0%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Total</td>
<td>150 (87.2%)</td>
<td>13 (7.6%)</td>
</tr>
</tbody>
</table>

Source: Field Survey, 2014. ($\chi^2 = 1.89; p$ value $= 0.39; df = 2$ and $p > 0.050$)

While majority (86.3%) of agro producing enterprises experience no change in technological growth within the period, all the agro processing enterprises (100%) did not experience change in technology. This means that the rate of change in technology usage in the agro producing and processing enterprises is low.

The contribution of customer needs to technological growth

This section is set out to determine the contribution of customer needs that products meet to the technological growth of the agro enterprises. From Table 6, the result from the Chi square analysis indicates that the relationship between customer needs that products meet and technological growth was not significant, ($\chi^2 = 1.40; df = 2; p = 0.50$).

Table 6: The contribution of customer needs to technological growth

<table>
<thead>
<tr>
<th>Customer needs</th>
<th>Technological growth</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No change</td>
<td>Positive growth</td>
</tr>
<tr>
<td>Consumption need</td>
<td>46(90.2%)</td>
<td>2(3.9%)</td>
</tr>
<tr>
<td>Raw material need</td>
<td>104(86.0%)</td>
<td>11(9.1%)</td>
</tr>
<tr>
<td>Total</td>
<td>150(87.2%)</td>
<td>13(7.6%)</td>
</tr>
</tbody>
</table>

Source: Field Survey, 2014. ($\chi^2 = 1.40; p$ value $= 0.50; df = 2$ and $p > 0.050$)
The result shows that there is no difference in the technological growth of agro enterprises that supplied produce to meet the consumption needs of home consumers and agro enterprises that supplied produce to meet the raw material needs of agro processors. It can be explained that production technologies do not change as a result of the enterprise producing to satisfy the needs of customers. This is due to the fact that change in production technology is not dependent on only the type of customers served but also affordability, availability of an appropriately educated and trained workforce, and other factors as stated by Dennis et al. (2010) that technologies are not applied in isolation.

4.2 The contribution of funds availability for enterprise establishment to growth of the pineapple industry

The second objective of the study is to investigate the contribution of funds availability for enterprise establishment to the growth of the pineapple industry. This section seeks to answer the question; how does funds availability for enterprise establishment contributes to the growth of the pineapple enterprises? Funds availability for enterprise establishment was examined on whether entrepreneurs have knowledge of the availability of funds for the establishment of pineapple enterprise. This was categorized into two, thus available (those who had knowledge of availability of funds) and not available (those who do not have knowledge of availability of funds). Enterprise growth was measured by three growth indicators thus employment growth, sales growth, and technological growth. The section is sub divided into the following sub headings;

- The contribution of funds availability for enterprise establishment to employment growth of the pineapple industry.
• The contribution of funds availability for enterprise establishment to sales growth of the pineapple industry.

• The contribution of funds availability for enterprise establishment to technological growth of the pineapple industry.

4.2.1 The contribution of funds availability for enterprise establishment to employment growth

With reference to Table 7, the result obtained from the Chi square analysis shows that the relationship between funds availability for enterprise establishment and employment growth was significant, ($\chi^2 = 5.91; \text{df} = 1; p = 0.02$). The result indicates that entrepreneurs who have knowledge of the availability of funds are likely to obtain higher proportion (33.3%) of positive growth than entrepreneurs who do not have knowledge of availability of funds for enterprise establishment. This means that entrepreneurs with knowledge of funds availability for enterprise can access the funds to employ employees for the agro enterprise.

<table>
<thead>
<tr>
<th>Funds availability for enterprise establishment</th>
<th>Employment growth</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No Change</td>
<td>Positive growth</td>
</tr>
<tr>
<td>Available</td>
<td>4(66.7%)</td>
<td>2(33.3%)</td>
</tr>
<tr>
<td>Not available</td>
<td>155(93.4%)</td>
<td>11(6.6%)</td>
</tr>
<tr>
<td>Total</td>
<td>159(92.4%)</td>
<td>13(7.6%)</td>
</tr>
</tbody>
</table>

Source: Field Survey, 2014. ($\chi^2 = 5.91; \text{p value} = 0.02; \text{df} = 1 \text{ and p <0.050}$)

However this result is in contrast with the findings of Nganda et al. (2014), who indicated that, financial knowledge of the owner have a marginal weak association with employment growth of SMEs. The contrast can be due to constraints imposed by the
business environment, the firm and market characteristics as explained by Iacovone et al. (2013) in measuring business environment variables on the firm size of African firms. This could also be explained by the nature and size of the sample.

4.2.2 The contribution of funds availability for enterprise establishment to sales growth

The result of the Chi-square analysis from Table 8, shows that the relationship between funds availability for enterprise and sales growth was not significant, \( \chi^2 = 0.57; \) df = 2; \( p = 0.75 \). The result indicates that the knowledge of availability of funds for enterprise establishment by entrepreneurs does not contribute to the sales growth of agro enterprises. Thus the sales volume of agro enterprises of entrepreneurs who had knowledge of funds availability is not different from sales volume of agro enterprises of entrepreneurs who do not have knowledge of funds availability.

The result corroborates with the reports of some of the entrepreneurs that although they are aware of funds such as EDAIF, GPSDF and other funds, they require bank guarantee to access the funds but do not have the required collateral demanded by the banks thereby affecting the expansion of production and sales volume of products.

<table>
<thead>
<tr>
<th>Funds availability for enterprise establishment</th>
<th>Sales growth</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No change</td>
<td>Positive growth</td>
</tr>
<tr>
<td>Available</td>
<td>1 (16.7%)</td>
<td>4 (66.7%)</td>
</tr>
<tr>
<td>Not available</td>
<td>14 (8.4%)</td>
<td>113 (68.1%)</td>
</tr>
<tr>
<td>Total</td>
<td>15 (8.7%)</td>
<td>117 (68.0%)</td>
</tr>
</tbody>
</table>

Source: Field Survey, 2014. \( \chi^2 = 0.57; \) p value = 0.75; df = 2 and \( p > 0.050 \)
4.2.3 The contribution of funds availability for enterprise establishment to technological growth

Results of the Chi square analysis from Table 9, shows that the relationship between funds availability for enterprise establishment and technological growth was significant, \( \chi^2 = 16.13; \text{df}= 2; p = 0.00 \). The result means that entrepreneurs who had knowledge of funds availability are likely to achieve a positive technological growth than entrepreneurs who do not have knowledge of funds availability. It is clear from the table that a higher proportion (50.0%) of entrepreneurs who had knowledge of funds availability obtained a positive growth whiles a lesser proportion (6.0%) of entrepreneurs who do not have knowledge of funds availability do not have same. It shows that the likelihood of the entrepreneur who had knowledge of funds accessing it for technological enhancement is higher than those who do not have the knowledge of funds availability.

Table 9: The contribution of funds availability for enterprise establishment to technological growth

<table>
<thead>
<tr>
<th>Funds availability for enterprise establishment</th>
<th>Technological growth</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No change</td>
<td>Positive growth</td>
</tr>
<tr>
<td>Available</td>
<td>3(50.0%)</td>
<td>3(50.0%)</td>
</tr>
<tr>
<td>Not available</td>
<td>147(88.6%)</td>
<td>10(6.0%)</td>
</tr>
<tr>
<td>Total</td>
<td>150(87.2%)</td>
<td>13(7.6%)</td>
</tr>
</tbody>
</table>

Source: Field Survey, 2014. \( \chi^2 = 16.13; \text{p value} = 0.00; \text{df} = 2 \) and p < 0.050
4.3 The contribution of business information to the growth of the pineapple industry

With reference to the third objective of the study, this section examines the contribution of business information to the growth of the pineapple industry. It seeks to answer the question how does business information contributes to the growth of pineapple enterprises. Business information was viewed in two aspects, thus access to business information and business information sources. Enterprise growth was measured using three growth indicators thus employment, sales, and technological growth. This section is sub divided into the following sub sections;

- The contribution of business information to employment growth of the pineapple industry.
- The contribution of business information to sales growth of the pineapple industry.
- The contribution of business information to technological growth of the pineapple industry.

4.3.1 The contribution of business information to employment growth of the pineapple industry

The contribution of business information thus access to business information and business information sources to employment growth of pineapple enterprises are discussed in this section. It is sub divided into the following sub headings;

- The contribution of access to business information to employment growth of the pineapple industry.
The contribution of business information sources to employment growth of the pineapple industry.

The contribution of access to business information to employment growth

From Table 10, the Chi square result obtained from the analysis shows that the relationship between access to business information and employment growth was not significant, \( \chi^2 = 0.17; \text{df} = 1; p = 0.69 \). The result indicates that there is no significant difference in the growth of employment by entrepreneurs that have access to business information and those who do not have access to business information. This is in contrast to results by Bunyasi et al. (2014) which found out that access to business information had a significant effect on the growth of SMEs. This can be explained by the nature of the sample and the business environment pertaining in the country.

Table 10: The contribution of access to business information to employment growth

<table>
<thead>
<tr>
<th>Access to business information</th>
<th>Employment growth</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No Change</td>
<td>Positive growth</td>
</tr>
<tr>
<td>Access</td>
<td>157 (92.4%)</td>
<td>13 (7.6%)</td>
</tr>
<tr>
<td>No access</td>
<td>2 (100.0%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Total</td>
<td>159 (92.4%)</td>
<td>13 (7.6%)</td>
</tr>
</tbody>
</table>

Source: Field Survey, 2014. \( \chi^2 = 0.17; \text{p value} = 0.69; \text{df} = 1 \text{ and } \text{p} > 0.050)\)

The contribution of business information sources to employment growth

With reference to Table 11, the result from the Chi square analysis reveals that the relation between business information sources and employment growth was not significant, \( \chi^2 = 0.17; \text{df} = 3; p = 0.69 \).
Table 11: The contribution of business information sources to employment growth

<table>
<thead>
<tr>
<th>Business information sources</th>
<th>Employment growth</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No Change</td>
<td>Positive growth</td>
</tr>
<tr>
<td>Business advisory centres</td>
<td>1(33.3%)</td>
<td>2(66.7%)</td>
</tr>
<tr>
<td>Family/Friends</td>
<td>70(86.4%)</td>
<td>11(13.6%)</td>
</tr>
<tr>
<td>AEA/NGOs</td>
<td>86(100.0%)</td>
<td>0(0%)</td>
</tr>
<tr>
<td>No source</td>
<td>2(100.0%)</td>
<td>0(0%)</td>
</tr>
<tr>
<td>Total</td>
<td>159(92.4%)</td>
<td>13(7.6%)</td>
</tr>
</tbody>
</table>

Source: Field Survey, 2014. ($\chi^2 = 0.17; p \text{ value} = 0.69; \text{df} = 3 \text{ and } p > 0.050$)

This indicates that there is no significant difference in the employment growth of entrepreneurs who access business information through business advisory centres, family/friends, AEAs/NGOs and those who do not access information from any of these sources. There is the possibility that the business information received by the entrepreneurs were used in other areas of the business other than in the area of employment of workers.

4.3.2 The contribution of business information to sales growth of agro enterprises

This section discusses the contribution of business information (access to business information and business information sources) to the sales growth of agro enterprises. The section is sub divided into the following sub themes;

- The contribution of access to business information to sales growth of agro enterprises.
- The contribution of business information sources to sales growth of agro enterprises.
The contribution of access to business information to sales growth

As presented in Table 12, the result of the Chi square analysis shows that the relationship between access to business information and sales growth was not significant, ($\chi^2 = 0.95; \text{df}= 2; p = 0.62$). The result means that there is no significant difference in the sales growth of pineapple enterprise owned by entrepreneurs who had access to business information and those who do not have access to business information. However Muriithi et al. (2014) established that interaction with extension service providers positively impacted on the earnings of the dairy farmers in Kenya. The contrast in the result may be due to country differences, the nature and size of the sample and the type of agro enterprise that was investigated.

Table 12: The contribution of access to business information to sales growth

<table>
<thead>
<tr>
<th>Access to business information</th>
<th>Sales growth</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No change</td>
<td>Positive growth</td>
</tr>
<tr>
<td>Access</td>
<td>15(8.7%)</td>
<td>117(68.0%)</td>
</tr>
<tr>
<td>No access</td>
<td>0(0%)</td>
<td>2(100.0%)</td>
</tr>
<tr>
<td>Total</td>
<td>15(8.7%)</td>
<td>117(68.0%)</td>
</tr>
</tbody>
</table>

Source: Field Survey, 2014. ($\chi^2 = 0.95; \text{p value} = 0.62; \text{df}= 2$ and $p > 0.050$)

The contribution of business information sources to sales growth

The result of the Chi square analysis from Table 13, shows that the relationship between business information sources and sales growth was significant, ($\chi^2 = 17.24; \text{df}= 6; p = 0.01$). From the results there is a significant difference in the sales growth of the pineapple enterprise and the various sources of business information.
Table 13: The contribution of business information sources to sales growth

<table>
<thead>
<tr>
<th>Source of business information</th>
<th>No change</th>
<th>Positive growth</th>
<th>Negative growth</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business advisory centres</td>
<td>2(66.7%)</td>
<td>0(0%)</td>
<td>1(33.3%)</td>
<td>3(100.0%)</td>
</tr>
<tr>
<td>Family/Friends</td>
<td>9(11.1%)</td>
<td>55(67.9%)</td>
<td>17(21.0%)</td>
<td>81(100.0%)</td>
</tr>
<tr>
<td>AEA's/NGOs</td>
<td>4(4.7%)</td>
<td>60(69.8%)</td>
<td>22(25.6%)</td>
<td>86(100.0%)</td>
</tr>
<tr>
<td>No source</td>
<td>0(0%)</td>
<td>2(100.0%)</td>
<td>0(0%)</td>
<td>2(100.0%)</td>
</tr>
<tr>
<td>Total</td>
<td>15(8.7%)</td>
<td>117(68.0%)</td>
<td>40(23.3%)</td>
<td>172(100%)</td>
</tr>
</tbody>
</table>

Source: Field Survey, 2014. ($\chi^2$ = 17.24; p value = 0.01; df = 6 and p <0.050)

It can be observed that higher proportion (67.9% and 69.8%) of entrepreneurs who accessed business information from family/friends and AEA's/NGOs respectively obtained positive growth in sales. The result agrees with Muriithi et al. (2014) who established that interaction with extension service providers positively impacted on the earnings of the dairy farmers in Kenya. This can be explained by the fact that most of the entrepreneurs access their business information from Agric Extension Agents (AEAs) and NGOs as the dairy farmers. The AEAs are perceived to be the specialist in the agro enterprise sector and therefore an entrepreneur in the field would implement advices from these officers than other sources. This indicates that business information sources contribute to sales growth of agro enterprises.

4.3.3 The contribution of business information to technological growth of the pineapple industry

This section examines the contribution of business information (access to business information and business information sources) to the technological growth of the pineapple industry. This section is sub divided into the following headings:

- The contribution of access to business information to technological growth of the pineapple industry.
The contribution of business information sources to technological growth of the pineapple industry.

The contribution of access to business information to technological growth of agro enterprises

The Chi square analysis result from Table 14, shows that the relationship between access to business information and technological growth was significant, \( \chi^2 = 36.65; \) df= 2; p = 0.00). The result indicates that there are differences in technological growth of entrepreneurs who had access to business information and those who do not have access to business information. It can be observed from the results that a higher proportion (100.0%) of entrepreneurs who do not access business information had a negative technological growth. Possible explanation may be that the entrepreneurs did not get information to maintain or change technologically. Also information obtained by those who access business information affects their decision to change technology usage. High proportion (88.2%) of entrepreneurs who had access to business information achieved no growth due to other reasons given by the entrepreneur such as the expensive nature of the technology.

Table 14: The contribution of access to business information to technological growth

<table>
<thead>
<tr>
<th>Access to business information</th>
<th>Technological growth</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No change</td>
<td>Positive growth</td>
</tr>
<tr>
<td>Access</td>
<td>150(88.2%)</td>
<td>13(7.6%)</td>
</tr>
<tr>
<td>No access</td>
<td>0(0%)</td>
<td>0(0%)</td>
</tr>
<tr>
<td>Total</td>
<td>150(87.2%)</td>
<td>13(7.6%)</td>
</tr>
</tbody>
</table>

Source: Field Survey, 2014. \( \chi^2 = 36.65; \) p value = 0.00; df = 2 and p <0.050)
The contribution of business information sources to technological growth of agro enterprises

With reference to Table 15, the result of the Chi square analysis shows that the relationship between business information sources and technological growth was significant, ($\chi^2 = 57.51; df = 6; p = 0.00$). This shows that there are differences in the technological growth of the various sources of business information. From the table a higher proportion (100.0%) of entrepreneurs who obtained their business information from business delivery services and from family/friends recorded no change in technological growth. Technological growth observed in the entrepreneurs who obtained business information from AEAs/NGOs had higher proportion (15.1%) of positive growth compared to other sources of business information. It can be noted that entrepreneurs who do not obtain business information from the listed sources had negative technological growth. Business information sources therefore contribute to the technological growth of agro enterprises.

Table 15: The contribution of business information sources to technological growth

<table>
<thead>
<tr>
<th>Business information sources</th>
<th>Technological growth</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No change</td>
<td>Positive growth</td>
</tr>
<tr>
<td>Business advisory centres</td>
<td>3(100.0%)</td>
<td>0(0%)</td>
</tr>
<tr>
<td>Family/Friends</td>
<td>81(100.0%)</td>
<td>0(0%)</td>
</tr>
<tr>
<td>AEAs/NGOs</td>
<td>66(76.7%)</td>
<td>13(15.1%)</td>
</tr>
<tr>
<td>No source</td>
<td>0(0%)</td>
<td>0(0%)</td>
</tr>
<tr>
<td>Total</td>
<td>150(87.2%)</td>
<td>13(7.6%)</td>
</tr>
</tbody>
</table>

Source: Field Survey, 2014. ($\chi^2 = 57.51; p value = 0.00; df = 6 and p <0.050$)
4.4 The contribution of entrepreneur’s expertise to the growth of the pineapple industry

The fourth objective of the study is to determine the contribution of expertise of entrepreneurs to the growth of pineapple enterprises. It answers the research question; how entrepreneur’s expertise does contribute to the growth of pineapple enterprises. This section explores the contribution of entrepreneur’s educational background, and previous work background to the expertise of the entrepreneur. It finally examines the contribution of expertise from both educational background and previous work background to the growth of the pineapple industry.

4.4.1 The contribution of entrepreneur’s educational background to entrepreneur’s expertise

This section examines the contribution of entrepreneur’s educational background before establishment of agro enterprise to the expertise acquired for establishment and management of the pineapple enterprise. Entrepreneur’s educational background was categorized into no formal education; primary school education; JSS/Middle school education; senior secondary school education, and tertiary education.

<table>
<thead>
<tr>
<th>Entrepreneur’s educational background</th>
<th>Expertise from educational background</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Expertise</td>
<td>No expertise</td>
</tr>
<tr>
<td>No formal education</td>
<td>0(0%)</td>
<td>24(100.0%)</td>
</tr>
<tr>
<td>Primary School education</td>
<td>9(28.1%)</td>
<td>23(71.9%)</td>
</tr>
<tr>
<td>JSS/Middle school</td>
<td>69(90.8%)</td>
<td>7(9.2%)</td>
</tr>
<tr>
<td>Senior secondary school</td>
<td>19(70.4%)</td>
<td>8(29.6%)</td>
</tr>
<tr>
<td>Tertiary education</td>
<td>13(100.0%)</td>
<td>0(0%)</td>
</tr>
<tr>
<td>Total</td>
<td>110(64.0%)</td>
<td>62(36.0%)</td>
</tr>
</tbody>
</table>

Source: Field Survey, 2014. ($\chi^2 = 91.95$; p value = 0.00; df = 4 and p <0.050)
With reference to Table 16, the result from the Chi square analysis shows that there is a significant relationship between entrepreneur’s expertise and their educational background, \((\chi^2 = 91.95; \text{df}= 4; \ p = 0.00)\). This means that the expertise of the entrepreneur with different educational background varies. It can be observed that a higher proportion (100.0%) of entrepreneurs who attained tertiary education had expertise for the establishment and management of the pineapple enterprise.

The result is similar to the findings of Holcombe (2003) that knowledge is necessary for the entrepreneur to recognize an entrepreneurial opportunity when one appears. Most of the entrepreneurs in the study indicated that they undertook an agricultural related programme during their formal educational training and that exposed them to the opportunities that exist in engaging in agro enterprise. Apart from the technical expertise acquired, entrepreneurs indicated having other expertise due to education which includes management skills, numeracy skills, communication and writing (recording) skills. The following narratives are examples typical of how some of the entrepreneurs’ statements support the finding;

“If I tell you school is not good I am lying to you”
(Pineapple producer from Fotobi)

“I am able to write and record my activities and also read information of processors’ requirements”(Pineapple producer from Pokrom)

“In Middle school we were given plots in the school garden to work on. I got most of my skills managing my plot at school” (Pineapple producer from Pepawani)

“I studied agriculture science at the tertiary level so I have a lot of knowledge. My education also helps me manage people and money”(Pineapple processor from Nsawam)
The narrative above clearly showed that entrepreneurs received some skills from their educational background. This indicates that educational background contributes to the expertise of the entrepreneur in the establishment and management of the pineapple industry.

4.4.2 The contribution of entrepreneur’s expertise from educational background to enterprise growth

This section investigates the contribution of the expertise of the entrepreneur acquired from his/her educational background to the three indicators of enterprise growth. Entrepreneur’s expertise from educational background is classified as expertise and no expertise. Expertise refers to entrepreneurs who acquired skills from their educational background and no expertise refers to entrepreneurs who did not acquire any skills from their educational background. It is divided into the following sections;

- The contribution of entrepreneur’s expertise from educational background to employment growth of the pineapple industry.
- The contribution of entrepreneur’s expertise from educational background to sales growth of the pineapple industry.
- The contribution of entrepreneur’s expertise from educational background to technological growth of the pineapple industry.
The contribution of entrepreneur’s expertise from educational background to employment growth of the pineapple industry

This section examines the contribution of entrepreneur’s expertise acquired from educational background to the growth of the pineapple industry in terms of employment. It can be observed from Table 17 that the relationship between entrepreneur’s expertise from educational background and employment growth was not significant, \( \chi^2 = 2.60; \) df = 1; \( p = 0.11 \). From the results a higher proportion (90.0% and 96.8%) of both entrepreneurs who acquired expertise from educational background and those who do not acquire any expertise respectively had no change in employee growth. This shows that expertise of entrepreneurs acquired from educational background does not contribute to the growth of enterprise in terms of employment. It can be explained from the data collected that most of the skills acquired from entrepreneur’s educational background are technical in nature and not managerial especially in the area of employment.

Table 17: The contribution of entrepreneur’s expertise from educational background to employment growth

<table>
<thead>
<tr>
<th>Entrepreneur’s expertise from educational background</th>
<th>Employment growth</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No Change</td>
<td>Positive growth</td>
</tr>
<tr>
<td>Expertise</td>
<td>99(90.0%)</td>
<td>11(10.0%)</td>
</tr>
<tr>
<td>No Expertise</td>
<td>60(96.8%)</td>
<td>2(3.2%)</td>
</tr>
<tr>
<td>Total</td>
<td>159(92.4%)</td>
<td>13(7.6%)</td>
</tr>
</tbody>
</table>

Source: Field Survey, 2014. \( \chi^2 = 2.60; \) p value = 0.11; df = 1 and \( p >0.050 \)
The contribution of entrepreneur’s expertise from educational background to sales growth of the pineapple industry

This section examines the contribution of the expertise acquired by entrepreneurs from their educational background to the sales growth of pineapple enterprises. Result of the Chi square analysis from Table 18 shows that the relationship between entrepreneur’s expertise from educational background and sales growth was not significant, ($\chi^2 = 2.13; \text{df}= 2; p = 0.35$).

This shows that there is no difference in the sales growth of entrepreneurs who acquired expertise from educational background and those who do not acquire expertise from educational background. This agrees with Kantis et al. (2004) in an IDB study that secondary school attainment had no discernable impact on firm growth. A possible explanation of the result could be due to the fact that expertise acquired was not used in the area of sales of produce.

Table 18: The contribution of entrepreneur’s expertise from educational background to sales growth

<table>
<thead>
<tr>
<th>Entrepreneur’s expertise from educational background</th>
<th>Sales growth</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No change</td>
<td>Positive growth</td>
</tr>
<tr>
<td>Expertise</td>
<td>8(7.2%)</td>
<td>73(66.4%)</td>
</tr>
<tr>
<td>No Expertise</td>
<td>7(11.2%)</td>
<td>44(71.0%)</td>
</tr>
<tr>
<td>Total</td>
<td>15(8.7%)</td>
<td>117(68.0%)</td>
</tr>
</tbody>
</table>

Source: Field Survey, 2014. ($\chi^2 = 2.13; p \text{ value} = 0.35; \text{df} = 2 \text{ and } p > 0.050$)
The contribution of entrepreneur’s expertise from educational background to technological growth of the pineapple industry

With reference to Table 19, the Chi square result shows that the relationship between entrepreneur’s expertise from educational background and technological growth was not significant, ($\chi^2 = 0.80; df= 2; p = 0.67$). This result indicates that there are no differences in the technological advancement of entrepreneurs who had expertise from their educational background and those who do not acquire expertise from educational background. This may be due to the fact that technological advancement in the pineapple industry is mainly affected by the information provided by external experts in the field of agriculture such as the agric extension agents and facilitators from NGOs.

**Table 19: The contribution of entrepreneur’s expertise from educational background to technological growth**

<table>
<thead>
<tr>
<th>Entrepreneur’s expertise from educational background</th>
<th>Technological growth</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No change</td>
<td>Positive growth</td>
</tr>
<tr>
<td>Expertise</td>
<td>95(86.3%)</td>
<td>8(7.3%)</td>
</tr>
<tr>
<td>No Expertise</td>
<td>55(88.7%)</td>
<td>5(8.1%)</td>
</tr>
<tr>
<td>Total</td>
<td>150(87.2%)</td>
<td>13(7.6%)</td>
</tr>
</tbody>
</table>

Source: Field Survey, 2014. ($\chi^2 = 0.80; p value = 0.67; df = 2 and p >0.050$)

4.4.3 The contribution of entrepreneur’s previous work background to entrepreneur’s expertise

With reference to Table 20, the Chi square result shows that the relationship between entrepreneur’s previous work background and entrepreneur’s expertise from previous work background was significant, ($\chi^2 = 142.20; df= 1; p = 0.00$). This means that there is likely to be differences in the expertise of entrepreneurs who had a previous work background and those who do not have previous work background.
Table 20: The contribution of entrepreneur’s previous work background to entrepreneur’s expertise

<table>
<thead>
<tr>
<th>Entrepreneur’s previous work background</th>
<th>Expertise from previous work background</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Expertise</td>
<td>No expertise</td>
</tr>
<tr>
<td>Yes</td>
<td>80(92.0%)</td>
<td>7(8.0%)</td>
</tr>
<tr>
<td>No</td>
<td>0(0%)</td>
<td>85(100.0%)</td>
</tr>
<tr>
<td>Total</td>
<td>81(46.5%)</td>
<td>92(53.5%)</td>
</tr>
</tbody>
</table>

Source: Field Survey, 2014. ($\chi^2 = 142.20; p$ value = 0.00; df = 1 and $p < 0.050$)

From the table it can be observed that a high proportion (92.0%) of entrepreneurs who had previous work background had expertise. The result confirms the statement by Skutas et al. (2005) that a comprehensive human capital is accumulated through knowledge acquired by work experience or by running other businesses. It also confirms the findings of Lu et al. (2010) that most would-be entrepreneurs generally have had working experience in enterprises of varying degrees of state ownership or public organizations or government agencies. Most of the respondents in the study admitted acquiring their expertise from working with their previous organizations as shown in the following responses to the question on skills acquisition from previous work background:

“I worked for Combine Farms for years and that enabled me to know how to produce pineapple” (Pineapple producer from Fotobi).

“I have worked with Nsawam Cannery for about 20 years and that is where I conceived the idea to establish my own pineapple processing enterprise” (Pineapple processor from Nsawam).

“I worked with several pineapple producers before I started mine” (Pineapple producer from Otopah Yaw).

The above statements from entrepreneurs on the acquisition of expertise from their previous work background showed that most of them worked in the pineapple industry.
before establishing their enterprises. Apart from the skills they acquired from their previous work background, the conception of the idea to establish a pineapple enterprise was natured because of their previous work exposure.

4.4.4 The contribution of entrepreneur’s expertise from previous work background to the growth of the pineapple industry

This section discussed the results and its inferences of the relationship between entrepreneur’s expertise from previous work background and the three indicators of enterprise growth. It is divided into the following sub headings;

- The contribution of entrepreneur’s expertise from previous work background to employment growth of the pineapple industry.
- The contribution of entrepreneur’s expertise from previous work background to sales growth of the pineapple industry.
- The contribution of entrepreneur’s expertise from previous work background to technological growth of the pineapple industry.

The contribution of entrepreneur’s expertise from previous work background to employment growth of the pineapple industry

The Chi square result from Table 21 shows that the relationship between entrepreneur’s expertise from previous work background and employment growth was significant, ($\chi^2 = 7.95; \text{df}\ = 1; \ p = 0.01$). This means that there are differences in the growth in terms of employment in relation to expertise of entrepreneurs acquired from previous work background. It can be observed from the table that entrepreneurs who acquired expertise from their previous work background had a higher proportion (13.6%) of positive
employment growth than entrepreneurs with no expertise from their previous work background.

Table 21: The contribution of entrepreneur’s expertise from previous work background to employment growth

<table>
<thead>
<tr>
<th>Entrepreneur’s expertise from previous work background</th>
<th>Employment growth</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No Change</td>
<td>Positive growth</td>
</tr>
<tr>
<td>Expertise</td>
<td>70(86.4%)</td>
<td>11(13.6%)</td>
</tr>
<tr>
<td>No Expertise</td>
<td>89(97.8%)</td>
<td>2(2.2%)</td>
</tr>
<tr>
<td>Total</td>
<td>159(92.4%)</td>
<td>13(7.6%)</td>
</tr>
</tbody>
</table>

Source: Field Survey, 2014. ($\chi^2 = 7.95; p value = 0.01; df = 1$ and $p <0.050$)

A possible explanation is that entrepreneurs acquired management, communication and negotiation skills from their previous works that are used to employ and maintain their staff. This confirms the findings of Nitcher et al. (2010) that successful entrepreneurs benefited in particular in marketing, administration and negotiation skills developed in previous jobs. These skills acquired by the entrepreneur are a source of competitive advantage within the enterprise (Hernández-Maestro et al., 2009). The following narratives are typical of some statements obtained from the interactions with entrepreneurs during the field survey;

“My previous work as a manager helps me in taking managerial decisions” (Pineapple processor from Nsawam).

“In my previous work, I was employing people for the enterprise, so I know who to employ” (Pineapple processor from Adoagyiri).

“I know a lot of people I can employ to work for me” (Pineapple producer from Fotobi).

“I was a supervisor so I learnt how to deal with employees” (Pineapple producer from Pokrom).
From the above statements it can be observed that some of the entrepreneurs were ‘managers’, “employing people”, and “supervising others” in their previous works. Their work according to them has given them the experience and skills to manage, communicate, and negotiate with people for employment into their agro enterprises.

*The contribution of entrepreneur’s expertise from previous work background to sales growth of the pineapple industry*

From Table 22 the Chi square result shows that the relationship between entrepreneur’s expertise from previous work background and sales growth was not significant, ($\chi^2 = 1.46$; df $= 2$; $p = 0.48$). The result indicates that there is no difference in the sales growth of entrepreneurs who acquired expertise from previous work background and those who did not acquire expertise from their previous work background. The result contrast with Nitcher et al. (2005) assertion that experience gained on the job or through prior employment is a critical growth factor. The contrast may be as a result of the already defined markets that are available in the pineapple industry such that producers and processors do not need any skills for market identification hence improvement in sales volumes.

Table 22: The contribution of expertise from entrepreneur’s previous work background to sales growth

<table>
<thead>
<tr>
<th>Expertise from entrepreneur’s previous work background</th>
<th>Sales growth</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No change</td>
<td>Positive growth</td>
</tr>
<tr>
<td>Expertise</td>
<td>6(7.4%)</td>
<td>53(65.4%)</td>
</tr>
<tr>
<td>No Expertise</td>
<td>9(9.9%)</td>
<td>64(70.3%)</td>
</tr>
<tr>
<td>Total</td>
<td>15(8.7%)</td>
<td>117(68.0%)</td>
</tr>
</tbody>
</table>

Source: Field Survey, 2014. ($\chi^2 = 1.46$; p value = 0.48; df = 2 and p >0.050)
The contribution of entrepreneur’s expertise from previous work background to the technological growth of the pineapple industry

With reference to Table 23, the result of the Chi square analysis shows that the relationship between entrepreneur’s expertise from previous background and technological growth was significant, ($\chi^2 = 8.70; \text{df} = 2; p = 0.01$). The result shows that the technological growth of entrepreneurs who had expertise from previous work background and those with no expertise from previous work background had differences. The technical skills obtained from previous work environment are possible factors that enable entrepreneurs to enhance their technological usage. This may be due to the fact that the entrepreneurs are very much acquainted with technologies that work and those that do not work, and therefore take decisions based on their previous knowledge.

Table 23: The contribution of entrepreneur’s expertise from previous work background to technological growth

<table>
<thead>
<tr>
<th>Expertise from entrepreneur’s previous work background</th>
<th>Technological growth</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No change</td>
<td>Positive growth</td>
</tr>
<tr>
<td>Expertise</td>
<td>72(89.0%)</td>
<td>2(2.4%)</td>
</tr>
<tr>
<td>No Expertise</td>
<td>78(85.7%)</td>
<td>11(12.1%)</td>
</tr>
<tr>
<td>Total</td>
<td>150(87.2%)</td>
<td>13(7.6%)</td>
</tr>
</tbody>
</table>

Source: Field Survey, 2014. ($\chi^2 = 8.70; p \text{ value} = 0.01; \text{df} = 2$ and $p < 0.050$)
CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

In this chapter, the findings and results of the study are summarized. It draws conclusions to the study as well as provides recommendations for policy and further research. This study set out to examine the contribution of enterprise establishment factors to the growth of the pineapple industry in the Nsawam-Adoagyiri District in the Eastern Region of Ghana with focus on the pineapple industry. The study sought to answer the research question;

- How do enterprise establishment factors contribute to the growth of the pineapple industry?

The following were the objectives of the study;

i. To determine the contribution of enterprise characteristics to the growth of the pineapple industry in the Nsawam-Adoagyiri District.

ii. To examine the contribution of funds availability for enterprise establishment to the growth of the pineapple industry in the Nsawam-Adoagyiri District.

iii. To determine the contribution of business information to the growth of the pineapple industry in the Nsawam-Adoagyiri District.

iv. To investigate the contribution of entrepreneurs expertise to the growth of the pineapple industry in the Nsawam-Adoagyiri District.
5.1 Summary

Agro enterprise establishment and growth is essential for curbing unemployment and reduction in post harvest losses in agriculture. The establishment of these enterprises are underpinned by certain theories and processes. Two of these theories thus the discontinuity theory of enterprise establishment and the theory of previous organizational origin were employed in this study. The study was set out to investigate the contribution of the various variables identified in the enterprise establishment theories to the growth of agro enterprise with focus on the pineapple industry in the Nsawam – Adoagiyiri District in the Eastern Region of Ghana.

The survey design with the mixed method approach was used in the collection of both quantitative and qualitative data for the study. A survey was conducted using questionnaire with both open and closed ended items. The central premise of the design is that it will provide a better understanding of the research problem. Respondents numbering 172 entrepreneurs comprising of 40 females and 132 males in the pineapple industry were engaged in the study out of which 160 of them were pineapple producers from eight (8) farmer based organizations and twelve (12) pineapple processors in the district. Primary and secondary data were collected and analyzed using Chi square analysis to determine the significant relationship between the variables with the computer package SPSS for windows version 20.0.

Results from the analysis showed that the relationship between enterprise characteristics thus the type of agro enterprise, and the customer needs that products meet have a significant relationship with employment growth of the pineapple industry. This
implies that the type of agro enterprise and customer needs contribute to the employment growth of the pineapple industry. However, the type of agro enterprise, and customer needs that products meet do not have any significant relationship with both sales and technological growth of the pineapple industry. It can be concluded that enterprise characteristics contributed to the employment growth of the pineapple industry but not to sales and technological growth.

Chi square analysis used to investigate the contribution of funds availability for enterprise establishment to enterprise growth revealed that funds availability for enterprise establishment had a significant relationship with employment and technological growth. This can be attributed to the fact that entrepreneurs with the knowledge of funds can access the funds that would be used in the acquisition of expertise and technology thereby affecting employment and technological growth of the agro enterprise. The result also indicated that relationship between funding availability for enterprise establishment and sales growth was not significant.

Results of the contribution of business information to the growth of the pineapple industry revealed that access to business information had no significant relationship with employment and sales growth but had a significant relationship with technological growth. The significant relationship between access to business information and technological growth could be due to the type of information accessed by the entrepreneurs. The entrepreneurs indicated receiving more technologically related information than other type of information relating to human resource management and marketing. Results also showed that business information sources had no significant
relationship with employment growth but had a significant relationship with sales and technological growth. This implies that business information sources contribute to sales and technological growth of the pineapple industry.

The contribution of entrepreneur’s educational background to the expertise of the entrepreneurs was examined. Entrepreneur’s educational background was categorized into no formal education; primary school education; JSS/Middle school education; senior secondary school education; and tertiary education. Expertise from educational background was classified into expertise, and no expertise. The result revealed that the relationship between entrepreneur’s educational background and expertise from educational background was significant. It was observed that a higher proportion (100.0%) of entrepreneurs who attained tertiary education had expertise for the establishment and management of the agro enterprise. Thus expertise from entrepreneur’s educational background differs in relation to the educational background of the entrepreneur.

With regards to the contribution of expertise from entrepreneur’s educational background to the growth of the agro enterprises, the results showed that there was no significant relationship between entrepreneur’s expertise from educational background and the three growth indicators (employment, sales and technological growth). Thus there was no significant difference in the enterprise growth of entrepreneur’s who acquired expertise from their educational background and those who did not. This can be attributed to the fact that entrepreneurs who did not acquire education before enterprise establishment had themselves educated through trainings and workshops.
organised by NGOs and other organizations. These trainings increased their skills in their enterprise. It can therefore be concluded that entrepreneur’s expertise from educational background does not contribute to the growth of the pineapple industry.

The examination of the contribution of entrepreneur’s previous work background to the expertise of the entrepreneur in the establishment and management of the agro enterprises indicated that the relationship between entrepreneur’s previous work background and expertise from previous work background was significant. It was observed that a high proportion (92.0%) of entrepreneurs who had previous work background had expertise. This shows that entrepreneur’s who had worked for other organizations before establishing their agro enterprises had acquired skills in the establishment and management of agro enterprises than those who did not work with other organizations. Analysis of the results implied that previous work background of entrepreneurs contributes to their expertise in the establishment and management of the pineapple industry.

Regarding the contribution of entrepreneur’s expertise from previous work background to enterprise growth, the results indicated that there was a significant relationship between entrepreneur’s expertise from previous work background and two of the growth indicators thus employment, and technological growth. It was identified that entrepreneurs acquired human resource management and technical skills from their previous work environment which they used in their enterprises. This gives the entrepreneur a competitive advantage due to his/her knowledge from previous work background. There was no significant relationship recorded between entrepreneur’s
expertise from previous work background and sales growth. It can be concluded that entrepreneur’s expertise from previous work background contributes to the employment and technological growth of agro enterprises but not to sales growth.

5.2 Conclusion

This study has addressed the question of how enterprise establishment factors contribute to the growth of agro enterprises. The study identified that the characteristics of the agro enterprise thus the basic needs identified by the entrepreneur contributes to the employment growth of the enterprise. The findings support the fact that increased activity in the value chain especially in the processing of raw produce would lead to increase in employment. The characteristics of the pineapple industry however do not contribute to the growth in sales and technological advancement of the enterprise.

Funds availability for enterprise establishment was found to have a relationship with growth in employment and technological advancement. This suggests that if entrepreneurs are educated on where to get funds for pineapple enterprise establishment, it could be accessed for the acquisition of expertise and technology. Therefore funding is vital for enterprise growth. The findings also revealed that access to business information contributes to technological advancement of enterprise due to the type of information accessed by the entrepreneurs. However the source of business information contributes to sales growth and technological advancement of the pineapple industry.

Evidence from the study shows that entrepreneur’s educational background, and previous work background contributes to entrepreneur’s expertise in the establishment and management of the pineapple industry. However there was no significant
relationship between entrepreneur’s expertise from educational background and the three growth indicators (employment, sales, and technological growth). This was attributed to the fact that entrepreneurs had other forms of training that enhanced their skills in establishment and management of agro enterprises other than the formal education. Meanwhile entrepreneur’s expertise from previous work background was found to contribute to employment growth and technological growth of the pineapple industry. This was due to the human resource management and technical skills that entrepreneurs acknowledged receiving from their previous work environment.

On the whole, it was found out that the enterprise establishment factors identified and investigated had different contributions to the growth of the enterprise. The enterprise establishment factors do not only influence the entrepreneurial or enterprise establishment process but also contribute to the growth of the pineapple industry.

5.3 Recommendations

On the basis of the outcomes of the study, the following recommendations are offered for policy making and further research:

i. The undertaking of entrepreneurial training for graduates in agro enterprise since the study identified a relationship between educational background and expertise of the entrepreneur in the establishment and management of agro enterprises. This will help curb graduate unemployment and its related problems.

ii. Education of would-be entrepreneurs on funds availability for enterprise establishment since knowledge of funds availability could lead to access hence
the growth of the enterprises. This could be done through the organization of financial literacy programmes by NBSSI and other developmental organizations.

iii. Further research could expand the scope of the study by investigating the enterprise establishment factors with various agro enterprises from different commodities since this study was restricted to one commodity.
REFERENCES


Otoo, K. N., Osei-Boateng, C., & Asafu-Adjaye, P. (2009). *Information & Knowledge for the working class the labour market in Ghana: A Descriptive Analysis of the


World Bank (2001). *World Development Indicators*.

APPENDICES

APPENDIX I: Field Research Questionnaire
University of Ghana
School of Graduate Studies
Department of Agricultural Extension

FIELD RESEARCH QUESTIONNAIRE

RESEARCH TOPIC
The contribution of Enterprise Establishment Factors to the Growth of Agro Enterprises in the Nsawam-Adoagyiri District in the Eastern Region of Ghana

Research Objective: To determine how the enterprise establishment factors contribute to the growth of agro enterprises.

A. Enterprise Establishment
This section is designed to obtain information on the time of conceptualization of enterprise idea and the establishment of the agro enterprise.

1. When did you conceive the idea of establishing the agro enterprise?
2. After what time period did you establish the agro enterprise?
3. Year of establishment of enterprise
4. Number of years of existence of the enterprise

B. Enterprise Characteristics
This section is designed to obtain information on the characteristics of the agro enterprises

5. What type of agro enterprise do you operate?
   a. Production enterprise
   b. Processing enterprise

6. Indicate the type of crop(s):

7. Current number of employees: Permanent …… Casual/Temporal……

8. Is the enterprise registered Yes No
   a. If Yes, state the year of registration of enterprise:
   b. If No, reasons:
C. Enterprise Growth

This section is designed to obtain information on three indicators of enterprise growth (employment growth, sales growth and technological growth).

9. Employment growth

What is the growth of employment for the past three (3) years?

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of employees Employed</th>
<th>Number of employees that left the enterprise</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10. Sales growth

What is your sales growth for the past three (3) years?

<table>
<thead>
<tr>
<th>Year</th>
<th>Products</th>
<th>Sales volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

11. Technological growth (Production and Processing enterprises)

What are the types of technologies used for the past three (3) years?

<table>
<thead>
<tr>
<th>Year</th>
<th>Main activity</th>
<th>Technology used</th>
<th>Manual</th>
<th>Mechanical</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
D. Basic Task Identification

This section is designed to obtain information on the type of enterprise and the needs that the enterprise is established to addressed (Which basic task has the enterprise been established to addressed).

12. What are the products offered to customers?
   Products:............................................................................................................
   .........................................................................................................................

13. What types of customers patronizes the products of the enterprise?
   Products:  
   i. Community members  
   ii. Middlemen  
   iii. Non community members  
   iv. Wholesalers  
   v. Export market  
   vi. Others............................................

14. What need does the product meet for the customers?
   i. Consumption need  
   ii. Raw material/Industrial need  
   iii. Export need  
   iv. Any other............................................

15. What is the nature of demand for the products by the customers?
   i. Daily  
   ii. Weekly  
   iii. Fortnightly  
   iv. Monthly  
   v. Every two months

16. What are the comments or reactions of the customers towards the products that are offered?
   ...........................................................................................................................
   ...........................................................................................................................
17. Do you think the type of services/products that are offered to the customers affect the growth of the enterprise? Yes  No

   a. If yes, how……………………………………………………………………

   b. If no, why……………………………………………………………………

E. Supportive Business Environment (funds availability and business information)

This section is designed to obtain information on the business environment and how it contributes the growth of the agro enterprise.

18. Are you aware of financial policies available for the establishment of agro enterprises? Yes  No

19. If yes, which financial policies are you aware of?…………………………………………………………

20. Are there funds available for the establishment of the agro enterprise? Yes  No

21. If YES, do you think the availability of funds contributed to the growth of the agro enterprise? Yes  No

   Explain (How)………………………………………………………………

22. IF NO, do you think the unavailability of funds contributed to the growth of the agro enterprise? Yes  No

   Explain (How)………………………………………………………………

23. Do you have access to information on how to establish and manage agro enterprises? Yes  No

24. If yes, where do you get the business information from?

   a. Business delivery services

   b. Family/Friends

   c. Any other sources:………………………………………………
25. Do you think your access to business information contributed to the growth of the agro enterprise? Yes ☐ No ☐
Explain (How).................................................................
............................................................................................... 

F. Entrepreneurs’ expertise from educational background
This section is designed to obtain information on how the expertise of the entrepreneur contributes to the growth of the agro enterprise.

26. What was your educational background before the establishment of the agro enterprise?
   a. No formal education ☐
   b. Primary school ☐
   c. Middle school/JHS ☐
   d. Senior High School ☐
   e. Tertiary education ☐

27. Did you acquire any expertise from your educational background that helped in the establishment and management of the agro enterprise? Yes ☐ No ☐
   a. If yes, what expertise did you acquire?
      i. Technical skills
      ii. Numeracy skills
      iii. Writing skills
      iv. Managerial skills
      v. Communication skills
      vi. Any other.................................................................
   b. If no, why?........................................................................................................
      ...................................................................................................

28. If YES, do you think the expertise acquired due to your educational background contribute to the growth of the agro enterprise? Yes ☐ No ☐
Explain (How)......................................................................................

29. If NO, do you think not acquiring any expertise from your educational background contributes to the growth of the agro enterprise? Yes ☐ No ☐
G. Entrepreneur’s expertise from previous work background

This section is designed to gather information on the previous work background of the entrepreneur and its contribution to the growth of agro enterprise.

30. Have you worked in any organization(s) before establishing the agro enterprise?
   Yes   No

31. If yes, what type of organization(s) did you worked with?
   i. Agro enterprise
   ii. Non agro enterprise

32. What was the period that you worked with your previous organization?
   i. Below One (1) year to five years
   ii. Above five years to ten (10) years
   iii. Above ten (10) years

33. What position did you hold in your previous work?
   i. Technical position
   ii. Managerial position
   iii. Non technical and managerial position

34. What experience did you acquire from your previous work?
   i. Numeracy skills
   ii. Technical skills
   iii. Writing skills
   iv. Managerial skills
   v. Communication skills
   vi. Any other ...........................................

35. Do you think that the experience you acquired from your previous work influence your expertise in the area of agro enterprise s    
   a. If Yes, how:.......................................................... 
   b. If No, why:..........................................................

36. Do you think that the expertise you acquired from your previous work influence the growth of the agro enterprise?  Yes    No
a. If Yes, how: ............................................................

b. If No, why: ............................................................

37. Do you think not working for any organization before establishment of the agro enterprise contributed to your expertise in agro enterprise? Yes ☐ No ☐

Explain (How) .................................................................................................................................
........................................................................................................................................................

H. Entrepreneurs Characteristics

This section set out to get information on the personal characteristics of the entrepreneur

38. Sex: Male ☐ Female ☐

39. Age: ☐ ☐

40. Current Educational Level
   a. No formal education ☐
   b. Primary school ☐
   c. Middle school/JHS ☐
   d. Senior High School ☐
   e. Tertiary education ☐

41. Location of Agro enterprise: ..............................................................

42. District: .............................................................................................

43. Region: ..............................................................................................

44. Name of Entrepreneur (Optional): ...............................................................
Appendix II: List of Selected Farmer Based Organizations in the pineapple industry

Fotobi Cooperative Pineapple Growers and Marketing Society Ltd

Pokrom Patriotic Cooperative Farmers Society Ltd

Pepawani Kwame from Cooperative Pineapple Growers and Marketing Society Ltd

Apesika Cooperative Pineapple Growers and Marketing Society Ltd

Biakoye Cooperative Pineapple Growers and Marketing Society

Adonten Cooperative Pineapple Growers and Marketing Society

Otopah Yaw Cooperative Food Farmers and Marketing Society Ltd

General Agric Workers Union (GAWU)