ASSESSMENT OF PROBLEMS FACED BY AGRO-BASED INDUSTRIES: A CASE STUDY OF BLUE SKIES PRODUCTS GHANA LIMITED IN NSAWAM

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A DISSERTATION SUBMITTED TO THE INSTITUTE OF STATISTICAL, SOCIAL AND ECONOMIC RESEARCH, UNIVERSITY OF GHANA, LEGON IN PARTIAL FULFILLMENT FOR THE AWARD OF MASTER OF ARTS DEGREE IN DEVELOPMENT STUDIES

DECEMBER, 2014
DECLARATION

I declare that this thesis is my own original work that I have done with the support of my supervisor. However, since scholarship is a cooperative enterprise other peoples work have been used such as printed source, electronic, internet or other sources; in all such instances careful acknowledgement has been ensured and referenced in accordance with departmental requirements. “Assessment of problems faced by agro-based industries: A case study of Blue Skies Products Ghana Limited in Nsawam” is my own work.

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SUPERVISOR
DEDICATION

This work is dedicated first and foremost to the Almighty God for His mercy, abundant grace and showers of blessings, and to my beloved wife, Mrs. Gladys Buruwaa Nuamah; and my lovely children: Jeffery Oduku Nuamah, Papa Yaw Danquah Nuamah and Maame Yaa Anomwaa Nuamah.
ACKNOWLEDGEMENTS

My first and foremost thanksgiving goes to the Almighty God for seeing me through to this far. Lord, my God, it is through your miraculous mercy that I was able to complete this program with all its impediments and hindrances. I am most grateful to you father.

Secondly, I wish to thank all the lecturers at ISSER for their immense academic impartation on me. Special thanks go to my supervisor, Prof. Augustin K. Fosu, for his patience and guidance. Prof, I cherish your contributions and the prompt feedback from you despite your busy schedules.

I also want to acknowledge my wife, Mrs. Gladys Buruwaa Nuamah, and my children for their prayers, understanding, encouragement and earlier persistent pressure on me to do this course. I would have abandoned the course when it became tough if you had not encouraged me.

I appreciate the immense help of all the members of my study group especially during the second semester. Additionally, I appreciate the outstanding support I received from Mrs. Ivy Asubonteng of the Graduate School, University of Ghana Legon whose immense contribution made me sail through this course. I also appreciate the wonderful support from Dr. Simon Bawa of ISSER.

Finally, I wish to acknowledge with utmost gratitude to the staff of the Blue Skies Products Ghana Limited in Nsawam for the support they gave me in my data collection. Special thanks go to Mr Eric Oduro Ampaabeng, Assistant Human resource Manager, Thank you for showing such a wonderful cooperation.
ABSTRACT

The study was designed to assess the problems faced by agro-based businesses. It specifically examined the major constraints facing the establishment, operations and marketing of agro-business in Nsawam Adoagyiri Municipality. The study adopted the quantitative survey as its research design/approach, which according to Ahiadeke (2008) is a data collection method which requires asking people, referred to as respondents for information using either verbal or written questions. The study chose Blue Skies Products Ghana Limited, one of the thriving agro-based industries located in Nsawam, for the case study and consequently retrieved 85 out of the targeted 100 workers as the recovered sample size. The relative importance index (RII) was used to rank the various challenges that face agro-based industries.

The study concludes that the problems associated with establishing agro-based companies include the depreciation of the Cedi and other micro-economic issues, limited access to credit, high interest rates and fluctuating exchange rates, high transportation costs, a lack of support facilities such as tax mitigation and raw materials of poor quality and unreliable supply, in a descending order of importance. Similarly, the operational challenges include the depreciation of the Cedi and other micro-economic issues, inconsistent power supply, insufficient supply of raw materials, lack of bigger market to sell produce, and port congestion/high clearing charges. The marketing challenges include depreciation of the Cedi and other micro-economic issues, and the lack of a bigger market to sell produce emerged topmost while the financial markets, failure to adapt to changes, the failure to search out for prospective market niches were the problems that needed urgent redress.

The study therefore recommends that government should address the frequent power outages and the foreign exchange problems in order to position agro-based industries to be efficient in the delivery of quality products and the creation of employment for young people. Also, the local assemblies should promote integrated industrialization by ensuring that agro-industries combine a mix of employment generation and diversification of occupations together with land reforms, reorientation of the credit system and massive public investment in rural infrastructure.
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<tr>
<td>FAO</td>
<td>Food and Agricultural Organisation</td>
</tr>
<tr>
<td>IBM</td>
<td>International Business Machine</td>
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<tr>
<td>SPSS</td>
<td>Statistical Package for Social Sciences</td>
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<tr>
<td>KM</td>
<td>Kilometers</td>
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<tr>
<td>ISO</td>
<td>International Standards of Operations</td>
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<td>SME</td>
<td>Small Medium Enterprises</td>
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<td>GDP</td>
<td>Gross Domestic Product</td>
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<tr>
<td>ISSER</td>
<td>Institute of Statistical Social and Economic Research</td>
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<tr>
<td>LDCs</td>
<td>Least Develop Countries</td>
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<tr>
<td>NEPAD</td>
<td>New Partnership for African Development</td>
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<tr>
<td>GPRS</td>
<td>Ghana Poverty Reduction Strategy</td>
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<td>MDGs</td>
<td>Millennium Development Goals</td>
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<td>RII</td>
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CHAPTER ONE
INTRODUCTION

1.1 Background of the study

Agro-business is considered as an extended arm of agriculture. The growth of the agro-business industry helps stabilize and make agriculture more profitable and create employment opportunities both at the production and marketing stages (Wily, 2006). Multinational growth of the agro-business industry, therefore, improves both the social and physical infrastructure. Since agro-business causes diversification and commercialization of agriculture, it enhances the income gain of farmers, creates food surpluses and improves the livelihoods of people (Mehta, 2012).

The agro-industry is made up of the post-harvest activities of processing and preservation of agricultural products for intermediate or final consumption (Aune and Andre, 2008). In the context of industrial development, the significance of agro-business industry is relative to agricultural expansion as economies develop. Hence, agro-business becomes an important sector in developing countries as a means for building industrial capacities (Mehta, 2012).

A large number of African countries are highly dependent on agriculture. Thus, agriculture is the backbone of many developing countries and Ghana is not an exception. While on average the agricultural sector accounts for one-fourth of Gross Domestic Product (GDP), in some Least Developed Countries (LDCs) this share reaches or surpasses 50 percent. Over 30 per cent of the African population depends on agriculture for their livelihood, but in some of the poorest countries this share reaches 90 percent (FAO, 2008). Overall, agricultural exports from African countries (including raw materials and processed foods) represent half of total merchandise exports, and exceed 80 percent in some cases. Agricultural growth, therefore, plays a central role in the process of overall economic growth and poverty reduction. For some developing countries,
the rise in imports of agricultural products by developed countries has constituted an opportunity
to upgrade and diversify their agriculture and agro-industry, which in turn has stimulated growth.
For the most part, however, Africa has not been able to benefit from these trends. Part of the
reason lies in the positioning of Africa in world agricultural markets. In a nutshell, Africa has
mostly specialized in commodities where it faced stiff competition from other developing
countries and low world prices rather than in high value-added agricultural products (Mehta,
2012).

Agro processing offers great scope for conversion of farm produce to consumer commodities and
in the process reduces wastage, increase shelf- life resulting in value addition and higher income
transfer to the farmers from different classes of consumers, as the processed commodities has
wider market (Chengappa, 2004). Agro-industries have also been viewed as a safety valve that
needs to be built within rural areas to absorb surplus labour and provide relief to the problem of
large scale disguised unemployment. Srivastava (1989) added that, agro-business provides the
crucial industry linkages which helps accelerate agricultural development by creating backward
linkages (supply of credit, inputs and other production enhancement services) and forward
linkages (processing and marketing), adding value to the farmers produce, generating
employment opportunities, and increasing the net income of farmers. This, in turn, motivates the
farmers for better productivity and further opens up possibilities of industrial development.

The potential for agro-industrial development in the developing countries such as Ghana is
largely linked to the relative abundance of agricultural raw materials and low-cost of labour.
(Brahmbhatt and Hu, 2006). Operations of industries, therefore, become suitable if they are able
to make relatively intensive use of these abundant raw materials and unskilled labour and
partially rely on presumably scarce capital and skilled labour. In the establishment of agro-
business industries especially the small and medium-scale enterprises (SMEs), small plants may
be economically efficient, which make the industry more economical in developing countries where the domestic market is limited by low purchasing power and the small market size (Mehta, 2012). As economic growth and development proceed, the dynamic role of agro-business industries must be appraised in the framework of the increasing complexity of food systems and other agriculture-, fisheries- and forestry-based systems. This growing sophistication is accompanied by shifting relative weights of the value added and employment generated at various stages within these systems.

The growth of labor productivity, which is typically faster in agriculture than in other sectors of the economy (though unfortunately not in Africa generally), contributes to the release of labor force and hence its availability for other sectors, and to the decline of the value of the primary output of agriculture in the value of the final, processed goods. The ability of domestic agro processing to capture this economic opportunity and to contribute to progress in the agricultural sector, particularly in the quality dimension, is of great promise for the developing countries. This also underscores the continued significance of agriculture through its role as the basis for economic diversification, at the national as well as at the local level thereby contributing to a decentralization of economic and social progress (McGrath and McMillan, 2000).

The prevalence of the dominance of the bi-directional interdependence between agriculture and manufacturing reveals that Ghana is well positioned to attain higher growth due to the sectoral interdependence and the flows that improve the growth in these two sectors. Given that manufacturing growth stimulates agricultural growth, which in turn stimulates manufacturing, it is useful to set reform policies which remove restrictions on agriculture and increase its profitability. Over the years, the agricultural transformation through creation of forward and backward linkages with the industry has been emerging as an important option to overcome the increasing challenges of creating employment opportunities for the increasing labor force and
sustaining the livelihood of households in rural areas (Brahmbhatt and Hu, 2006). Furthermore, the agro-business industry generates new demand on the farm sector for more and different agricultural outputs, which are more suitable for processing (Srivastava, 1989). On the other hand, development of these industries would relax wage goods constraints to economic growth by enhancing the supply of their products (Desai and Naboodiri, 1992). In this context, there is a need for improving the capacity of the agro-industries to harness backward linkages with agriculture and allied activities in order to efficiently convert part of the output to acceptable value added products acceptable to the domestic and international markets.

The agro-business industry is regarded as the greener sector of the Ghanaian economy in view of its large potential for development and likely socio-economic impact specifically on employment and income generation. Some estimates suggest that in developed countries, approximately 14 percent of the total work force is engaged in agro-processing directly or indirectly (Mehta, 2012). The cornerstone of the Ghanaian economy has, since independence, been the agricultural sector. The sector is mainly subsistence and rural-oriented, and has been growing on average at a rate of 4.6 per cent since 2000 (Desai and Naboodiri, 1992). This has contributed to an average of 39.5 percent to Gross Domestic Product (GDP) between 2000 and 2007, and has resulted in the employment of about 55 per cent of Ghana’s population.

However, agro-business enterprises in Ghana operate on small to medium-scale and, therefore, face problems emanating from the bureaucratic and legal regulatory framework, socio-economic environment such as access to finance, market, plant and equipment (Wilkinson and Rocha, 2008). Because of their limited scale of operations, the cost of participation and capacity-building are relatively more disproportionate for the SMEs in comparison with the large firms. Over the past years, Ghana has been working towards creating a robust agro-business industry to spearhead her development agenda and from policies and international
agreements such as Vision 2020, GPRS I & II, the Millennium Development Goals (MDGs), the New Partnership for African Development (NEPAD), Ghana has inched forward in expanding her agro-based industries within a relatively volatile trade environment (Birner et al., 2009). The agro-processing industry in Ghana plays a vital role in the national economic development and has potential of meeting the local needs and export requirements (Bhattacharya 1980). However, the supporting infrastructure for this industry in terms of electricity supply through the government-funded rural electrification program, and road and telecommunication network, is not well-established (Evans and Wurster, 2000). Currently, the agro-business sector faces many challenges emanating from the poor performance of the national economy, uncertainties that exist over access to both local and foreign finances, limited research, limited technical advice, limited marketing information and lack of reliable markets (Mehta, 2012).

1.2 Problem of the study

In Ghana, the agricultural sector has for several years been the economic rescuer by contributing largely to the GDP of the nation (Feder et al., 2003). The agro-business industry then has the potential to play a major socio-economic role and provides a relatively high percentage of total employment to the people of Ghana. However, in spite of the various contributions made by the agro-business sector, there are numerous challenges limiting the productivity of this sector. These problems emerge right from the initiation of establishment of the firm to its operation, processing and marketing (Kulkarni and Srivastava, 1985). Suitable or required raw materials for processing are usually inadequate, compounded by the seasonal nature of the agriculture produce which greatly reduces the productivity as well as profitability of agro-business enterprises. In addition, most farm produce is highly perishable and, therefore, poor post-harvest handling results in heavy losses of raw materials for processing. A study by Srivastava (1989)
revealed that 30 percent of harvested fruits and vegetables get lost in the process of handling, processing and marketing by agro-based industries. Similarly, Chadha (1989) found that the non-availability or paucity of processing varieties of fruits and vegetables, the short period of raw materials availability and excessive costs of raw materials are important constraints for the development of agro-businesses. In addition, only a small fraction (about 1.5 percent) of the fruits and vegetables produced in Ghana are processed, leading to under-processing, with similar situations occurring in agro-based non-food commodities (Srivastava 1989).

Financial or fiscal requirements at different stages of the operation of the units of agro-business enterprises, as well as the high cost of packaging, have been recognized as the major constraints in operating in this sector (APEDA, 1989). Similarly, processed/packed food products have been considered luxury items and, therefore, have been subjected to high tax incidence at various stages of processing. The incidence of taxes has been estimated in the range of 30 percent to 60 percent of the factory costs (Govt. of India, 1989). There is also the problem of the land tenure system in Ghana, especially acquisition of large hectares of land for commercial purposes.

Presently, there have been several initiatives from both the Ghana government and corporate bodies towards the attainment of food security and a stable economy, with agro-business operations standing a high chance in championing these courses. However, there are numerous challenges that militate against the establishment, production and marketing of agro-business’ products (Govt. of India, 1989; FAO, 2008). It is, therefore, imperative to thoroughly assess the problems facing agro-business enterprises in Ghana using the case of Nsawam.

1.3 Objectives of the study
The main objective of the study is to assess the problems faced by agro-business, as represented by Blue Skies Products Ghana Limited in Nsawam.
The specific objectives of the study are to:

- Identify the major constraints facing the establishment of agro-business, as represented by Blue Skies Products Ghana Limited in Nsawam
- Assess the factors that hinder the operations of agro-business, as represented by Blue Skies Products Ghana Limited in Nsawam
- Ascertain the marketing challenges encountered by agro-business, as represented by Blue Skies Products Ghana Limited in Nsawam

1.4 Research questions

- What are the major constraints facing the establishment of agro-business in Nsawam?
- What are the factors that hinder the operations of agro-businesses in Nsawam?
- Do agro-businesses in Nsawam encounter marketing challenges?

1.5 Hypothesis

- There are major constraints facing the establishment of agro-business in Nsawam
- There are several factors that hinder the operations of agro-businesses in Nsawam.
- Agro-businesses in Nsawam encounter several marketing challenges

1.6 Significance of the study

Agro-business plays vital roles in terms of ensuring a vibrant economy and improving livelihoods of the populace. However, the constraints facing the agro-industry in Ghana, precisely, Nsawam have long been neglected. Therefore, this study is of high public importance as it seeks to address the major challenges confronting the agro-business industry that could potentially contribute massively to the Gross Domestic Product (GDP) of the country (ISSER,
The study will serve as a guide to policy makers, individuals, corporate bodies and the government in proper establishment and operation of agro-businesses in particularly in Nsawam, but with probable application to Ghana generally. The result of the study will help understand the major constraints facing the agro-business industry, at least in Nsawam, in terms of establishment, operation and marketing.

1.7 Scope and Limitations

This study is limited to one main agro-based industry in Nsawam which suggests that the sample of respondents will be drawn from the Blue Skies Products Ghana Limited. The sample size, though not truly representative, will enable the researcher to provide useful information on especially constraints facing agribusinesses. One of the major constraints perceived for this study is the financial and time implications. In a study of this nature, a considerable amount of time and money is required for successful completion. However, this study is expected to be completed within a specific academic time period which poses a great constraint. Likewise, a considerable amount of funds is needed to undertake the research.

1.8 Organization of the Study

The present study comprises five chapters. Chapter One serves as the introduction to the research and gives a synopsis of the rationale for the study, its objectives, significance and specifies the problem statement. Chapter Two is a review of the relevant literature. The third chapter is a detailed account of the methodology used in arriving at the conclusions. The methodology comprises the data type and the methods used in analyzing collected data. Furthermore, in this chapter the justification of the choice of the analytical tools is stated and explained. It also contains the sampling techniques used, the sample size, and the data source. Chapter Four
examines the results of the study in relation to the stated objectives. It refers to the analysis of the survey and other data collected. The final chapter, chapter five, is dedicated to conclusions, recommendations, and a proposal of further research topics emanating from this research.
CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

Ghana is an agricultural economy and agricultural growth has direct impacts on poverty reduction as well as on the prosperity of the country. As such, Ghana’s realistically continued development is mainly dependent on integration of its agricultural sector with industry. The development of the agro-business industry could help stabilize and make agriculture more lucrative as well as create more gainful employment opportunities both at the production and marketing stages. Agro-businesses are instrumental in harnessing the potentials of agriculture as well as industry through their mutual integration, thereby accelerating the rate of rural and economic development. The broad-based development of the agro-based industries would definitely improve both the social and physical infrastructure. Since vigorous agro-businesses cause diversification and commercialization of agriculture, careful diagnoses of its pertinent challenges would help enhance the income gains of farmers as well as creating food surpluses.

Furthermore, agro-based industries stand a high chance of improving the State’s income and facilitating the equitable distribution of income among the different sectors, regions and sections of the society. Large-scale employment opportunities are generated through the establishment of rigorous agro-businesses and contribute enormously to the process of self-sustained economic growth. This chapter deals with the reviews of studies conducted on agro-businesses at both the national and international levels in order to have a fair idea on the existing literature. The review mainly centers on an overview of the agro-business industry, agro-business and socio-economic development, major constraints facing the establishment of agro-business, factors hindering the operations of agro-businesses and marketing challenges encountered by agro-businesses. Besides, a discussion of the promotion of the development of the agro-business industry is included in this chapter.
2.2 Overview of Agro-business Industry

Agro-business is an important sector in the economy of many countries, especially in a developing country like Ghana. It contributes significantly to Gross Domestic Product (GDP) and it is a source of employment for many people (Donges, 2000). According to Bruinsma (2009), the agro- or agri-business sector comprises all the operations involved in the manufacturing of farm supplies, production, operations on the farm, as well as processing and distribution of farm commodities and items made from them. Aune and Andre (2008) and Wilkinson and Rocha (2009) also opined that, the agro-business industry comprises all the post-harvest activities that are involved in the transformation, preservation and preparation of agricultural production for intermediary or final consumption of food and non-food products. The term captures a diverse range of primary and secondary post-harvest activities, ranging from basic village-level commodity preparation to modern industrial processing and involving widely differing levels of scale, complexity and labour, capital and technological intensity.

Food processing industries tend to dominate this sector in developing countries, including Africa. Brahmbhatt and Hu (2006) grouped food processing industries into three categories: Primary – those that involve the basic processing of natural produce, for example, cleaning, grading and dehusking; secondary – those that include simple or elementary modification of natural produce, for example, hydrogenation of edible oils; and tertiary – those that include some form of advanced modification to the natural produce such as processing of tomatoes into ketchup and dairy products into cheese. Agro-business is a source of foreign exchange earnings as well as food and fiber which are considered to be strategically important for national security (Hussain and Ahmad, 2000). The agro-business sector in Ghana is viewed as a vital segment contributing
to economic prosperity of the nation and, as such, remains crucial in terms of labor absorption and export earnings (FAO, 2008). More importantly, since most agro-business activities occur in the rural areas, their development and sustainability could effectively alleviate poverty in many nations.

2.3 Agro-business and socio-economic development

Kamala and Khot (1999) assessed that industrialization had frequently been advocated as a means of solving the surplus-labour and low-income problems typifying many rural areas. The study revealed that regional development in terms of increased incomes and employment opportunities were enhanced if the primary material was carried through additional value addition and/or processing levels before exporting. Kamala and Khot (1999) stated that processing of agricultural produce at the primary level with efficient equipment and appropriate method offers immense benefits to both agriculture industry and the economy generally. Ousmane (2008) examined the agro-business industry in Andhra Pradesh, India, and found that agro-businesses do not only stimulate agricultural production but also result in diversification of activities for increased income and new employment opportunities. Barrett et al. (2010) also argued that, agricultural growth by itself does not solve the problem of poverty and unemployment among many nations but rather, integrated industrialization through agro-industries that seeks to combine a mix of employment generation and diversification of occupations together with land reforms, reorientation of credit system and massive public investment in rural infrastructure has a high possibility of success.

A study conducted by Prasad (1988) revealed that, agro-businesses have become the source of absorption of surplus labour in agriculture. He added that agro-based industries are important in tackling the basic economic problems of poverty and unemployment in the rural areas. The study
concluded that the establishment of new agro-industries would provide additional sources of livelihood, social amenities and effective community organization. Strong synergies exist between agro-business and poverty alleviation in that the former promotes entrepreneurship, raises demand for agricultural products and connects farmers with markets through the handling, processing, marketing and distribution of agricultural products (Beintema and Gert-jan, 2008). As a result, productivity and quality of agricultural production, farm returns, and economic stability for rural households, food security and innovation throughout the value chain can be enhanced. Efficient agro-business can therefore spur agricultural growth and reduce poverty.

2.4 Constraints Facing the Establishment of Agro-Businesses

According to Ousmane (2008), one major challenge facing the establishment of an agro-business firm is inadequate funding and high interest rate on lending capital. Ousmane stressed that most agro-business enterprises are set-up by individuals and, therefore, are faced with financial drain and hardly get support from the government and corporate bodies. Aune and Andre (2008) also added that high interest charges on bank loans greatly prevent most agro-businesses especially the new ones from competing with the well-established non-agro-business industries. Besides, the pressure to preserve the environment has grown considerably in recent years, which has halted many agro-infrastructure projects and land development, especially in the forest areas (Grant, 1998). Goffee and Jones (1996) also opined that the strict environmental rules, including requirements that land reserves (ranging from 20% to 80% of total area) be set aside by land users or developers are now placing further restrictions on the establishment of agro-businesses, since raw materials to feed the agro-industries are inadequately produced.

According to Feder et al. (1999), one of the major challenges facing the establishment of agro-business, especially in the developing world, is the lack of techno-economic development
options for strengthening the industry and foster equitable integration into market-oriented systems. In this respect, no special emphasis is given to technical feasibility studies, assessments of potential economic and environmental impacts, international procurement, and organizational linkages, resulting in poor establishment and collapse of agro-businesses. Barrett et al. (2010) also state that inadequate capability building in most agro-business firms, act as critical means of reducing their sustenance, productivity and marketing performances. This situation usually comes about as a result of agro-businesses paying no particular attention to strengthening their respective technical support organizations, design and technology centers as well as demonstration units for basic and advanced technologies. Feder et al. (2003), however, argue that the most common problems facing the establishment of agro-business industry are: (a) international trade barriers; (b) limited access to credit, high interest rates and fluctuating exchange rates; (c) poor trade policy; (d) export and import taxes on raw materials; (e) bureaucratic practices; (f) high transportation costs; (g) raw materials of poor quality and unreliable supply; (h) the lack of support facilities; and (i) the lack of professional managers.

In order to maintain proper establishment and sustainability of agro-business industry, there is the need for the industry to improve upon its productivity and efficiency, increase their integration into global value chains and promote diversity in rural livelihoods (Bruinsma, 2009). However, these are mainly not integrated into the short-, medium- and long-term plans of most agro-business firms and as such, skill upgrading, working methodologies and guidelines, process optimization, diffusion of appropriate agro-engineering systems, product innovation and diversification, compliance with quality and environmental standards, and participation in trade fairs and trade missions are poorly manned or undertaken, thus inversely derailing the level of productivity of the business. According to Beintema and Gert-jan (2008), highly renowned non-agro-business firms in the United States become well-established through frequent participation in global forum functions such as participation in the work of international organizations and
normative bodies; promotion of research on priority and novel commodities; preparation of training manuals and tool kits on agro-processes and technologies; and dissemination of agro-industrial data for decision making. Nonetheless, many agro-business firms fail to plan for regular participation in resourceful forums right from the establishment stage which generally leads to poor establishment and growth of the industry (Evans and Wurster, 2000).

A study done by Bandarla (1991) on the problems facing the operations of agro-business industries in Australia revealed that the major problems associated with the operations of agro-businesses are poor organizational structure, poor production and distribution channels, low technical know-how, inadequate training, poor industrial relations and inadequacy of management.

**2.5 Factors Hindering the Operations of Agro-Business Industry**

Several factors that hinder the operations of the agro-business industry have already been discussed. According to Evans and Wurster (2000), a key operational challenge is the inability to develop a realistic assessment of the capability and capacity of the firm or industry. This challenge goes beyond identifying the core competencies of the organization and the sustainable competitive advantage of the firm in an increasingly competitive market. Goffee and Jones (1996) added that, most agro-businesses fail to explicitly perform candid assessment of those areas where the firm’s efforts are unproductive or expertise is lacking. Specifically, agro-business firms fail to exploit and expand their capacities and competencies to maintain a strategic competitive advantage (Porter, 1996). According to Barett et al. (2010), many agro-business firms lack the capability to accurately identify and define their organizational goals, resulting in poor performance and/or productivity. Often, competitors cite cheap labour as an advantage in business; however, in reality, high taxes and confusing labour laws make hiring in many
countries less attractive (Kieran, 2010). This is aggravated by shortages of skilled labour (especially, in the rural areas) to manage machinery and equipment that are highly costly. According to Evans and Wurster (2000), labour deficits greatly affect the routine operations of any business of which the agro-business sector is not an exception. Grant (1998) stated that, a major obstruction to agro-business operation in recent years has been the rise in the dependence on foreign currencies, and thus; the high instability in the flows of the foreign currencies greatly impinges on the financial operations of agro-businesses which mostly rely on seasonal produce. Lambert (2001), however, opined that the prime challenges confronting the operation of the agro-business industry includes insufficient supply of raw-material, poor and inconsistent quality of processed products, and lack of technical support for the agro-industrial sector and absence of good management of the processing facility.

Jules (2006) states that securing competence and intellectual capital in agro-business is a major challenge that hinders their successful operations. Thus, more often than not, agro-businesses are able to determine the current skill levels needed in their daily operations, but fail to determine the capacities and competencies needed to successfully compete in the future. According to Goffee and Jones (1996), developing an attitude of continuous improvement, life-long learning, and a progressive orientation are the vital measures in securing competence and intellectual capital of agro-businesses. However, it is hardly observed among agro-business industries that investments have been made in training and developing competent employees who could effectively handle the operations of the firm (McGrath and McMillan, 2000).

Low accessibility to appropriate production and processing technologies has recently become a major challenge to the operation of agro-business industry (Pursell et al., 2009). In this regard, agro-businesses are unable to ensure that their products meet world quality requirements specified by the International Standard of Operation (ISO), resulting in low productivity and
general performance. Webber and Labaste (2010) add that, the agro-business sector is mainly faced with problems pertaining to the capability of producing major products and by-products in a steady and reliable manner as well as meeting market demand for products with standardized quality. For instance, banana chips produced in Indonesia continue to have an oily odour and are, therefore, rejected by Japanese consumers, directly impinging on the general operations and/or production.

A study done by Jules (2006) in Brazil, however, revealed that appropriate packaging and labelling posed greater threat to the agro-business industry especially, those operated on small and medium-scale level. The study concluded that the packaging of agro-business products sometimes does not meet the needs of international markets due to unattractive designs, inappropriate quality and inadequate labelling. For instance, the packaging material used for banana chips in Brazil is usually made in the form of large plastic sacks which do not completely protect the product from the process of deterioration. In the same manner, the labels usually do not indicate product ingredients or the expiry date of the product which makes it less competitive in the US market and in turn affects the production level and income of the firm. According to Grant (1998), low production levels and incomes negatively influence the routine operations of businesses especially, in highly competitive markets.

In addition, Wily (2006) stresses that most agro-business enterprises face difficulties in making commitments to the supply of agro-based products in specified amounts and in a continuous and reliable manner mainly due to the inefficient size and low productivity levels of landholdings. Moreover, the supporting industries (packaging, cold storage and warehousing) are not only inadequate, but also, are in need of development, which openly hinders successful operations of agro-business firms. Narrod et al. (2009) state that many agro-business enterprises find it difficult to promote their products on the open market due to the high costs involved. For
instance, many agro-business firms do not have company profiles and do not participate in any international exhibitions or promotion exercises, making their products solely confined within the region or country of production and thereby restricting production and marketing operations. Todd and Rose (2006) also argue that agro-business enterprises are faced with difficulties in accessing formal credit with low interest rates. Generally, the credit is accessed for funding their routine activities and formulating appropriate policies. Hence, the inability to access it usually leads to slow growth and/or poor performance of agro-businesses.

2.6 Marketing Challenges Encountered by Agro-Business Enterprises

According to Restuccia et al. (2007), market trends are generally defined by a number of factors including: (a) the population; (b) the economy; (c) increasing food imports; (d) westernization of the diet; (e) expansion of fast food outlets; (f) the development of retail and distribution systems; and (g) the improvement of market access. However, most agro-business firms fail to identify these factors which negatively impact on their market share and profitability. Porter (1996) also affirmed that most agro-business enterprises encounter problems with regards to the accurate identification of competitive advantages, understanding the market trend, identification of customer relationships, and provision of quality and adequate services to its customers which greatly thwart their products marketability and profit margins.

In recent decades, the changing tastes of consumers, the emerging competitive environment, the financial markets, and the changing customer satisfaction have indeed posed greater threat to the marketing of agro-business’ products, especially those that are newly established (Sonka, 2002). According to Tyner and Boehlje (1997), renowned agro-manufacturers always work to add value and differentiate their products in order to sustain their businesses; however, in the current competitive environment, this has become a big challenge to the agro-industry since any
innovation developed by a given agro-business firm is quickly copied and “commoditized” by other formidable firms. This, then, suggests that agro-business firms are mostly faced with enormous pressure on winning greater market share, which highly influences the internal operating efficiency.

According to Abbott et al. (2001), a major marketing challenge confronting the agro-business industry is failure to adapt to changes. The pace of change in the industry is very rapid and appears to be increasing, making the sector highly unstable. However, most agro-business firms are unable to accurately predict the sources of the changes and innovation, anticipate the changes and innovations which might occur in the future, and fail to manage their businesses to absorb and/or adjust to the changes which affect their marketability. Christensen (1997) opined that, ability to cope with changes in a given business improves the capacity of the business to deliver the defined products and services to its established customer base. However, Akridge et al. (2000) argued that, adopting a disruptive innovation requires that a business manager seeks out and pursues those new prospective customers and not expect the new marketing channel to promote the change. Hence, managers must understand how to search out niches and more narrowly defined markets, while managing the business to be cost effective at lower output levels. Nevertheless, managers of most agro-business firms fail to search for prospective market niches and are, therefore, faded out by rigorous non-agribusiness firms.

Since market premiums quickly dissipate as competitors copy, modify, or develop similar technologies, the potential rewards from maintaining technological leadership is substantial (Erickson et al., 2002). However, unique innovations that might create significant competitive advantage in the agro-business industry are shortly overcome by competitors through the creation of alternatives which are similar or perhaps superior in some ways. Again, the sophistication of today’s market-place makes it nearly impossible to completely protect an
innovation developed by agro-business firms, even though the concept might be technically protected by patent law (Grant, 1998). This really poses greater threat to the agro-business industry, since marketing strategies developed are easily succumbed by the non-agro-business industries thereby reducing their market shares and, consequently, their profit margins.

2.7 Promoting the Development of Agro-business Enterprises
In order to promote agro-business enterprises, production capabilities, adequate infrastructure, effective identification of niche markets and development of required skilled labour need to be greatly enhanced (Birner et al., 2010). According to Bonnen (1998), prudent macro-economic policies that ensure that the agro-business sector remains healthy must be promoted. Bonnen (1998, p 56) added that, in trade policy, “All export barriers such as export taxes for agricultural products and high import tariffs on inputs required by the agribusiness sector urgently need to be eliminated and proactive trade promotions pursued”. Birthal et al. (2005) also stressed that in order to effectively develop agro-business enterprises, policies and programs need to emphasize on: (a) the creation of a conducive business climate and a level playing field for small-scale agro-business ventures; (b) the strengthening of resource supplies and support institutions in rural areas; (c) the provision of needed investment in infrastructure and other public goods; and (d) the provision of training for agro-business enterprises.

Birner et al. (2009) also opined that, total development of agro-business enterprises would only be achieved when strong emphasis is placed on the creation of entrepreneurs, ensuring competitive products, stimulating local investors and human resource development, supporting business partnerships, and developing agro-business terminals. Hence, policy formulation should not discriminate against agro-business firms in trade and industry and related macro policies in order to ensure total growth of the sector. Akridge (2000) found that the development of the
agro-business industry depends on: (a) the modernization of the traditional food business; (b) the establishment of joint ventures and strategic alliances with world-class companies; and (c) improved collaboration between governments, industry, and research and development institutions in the production of the best seeds, processes and technologies.

2.8 Chapter Summary

Notwithstanding the numerous benefits derived from the agro-business sector, several challenges such as deficiencies in infrastructure, including poor transportation, storage facilities and high production costs have offset some of the benefits in recent years. Again, environmental pressures, high cost of labour, high interest and exchange rates and land litigation have regressed the sustainability and profitability of the agro-business industry. With the dramatic changes occurring in the industry in recent years, it is crucial for both firms and individuals to develop and maintain competencies that would enhance a competitive position in the present rapidly evolving market. Hence, dynamic capabilities which embrace new ideas, change, innovation, analyses, integration, and teamwork have to be adopted by the sector.

Economic globalization and market liberalization as well as market opportunities for agro-business products are greater in countries with competitive products. However, a more open market creates more competitors and more complex quality standards imposed by trading partners. It is, therefore, imperative for agro-business firms to explore possibilities for improving competitiveness and sustainability. Notwithstanding, governments and corporate bodies ought to devise competent policies that are conducive for agro-business development in order to reap the full potential and benefits of the sector.
CHAPTER THREE

METHODOLOGY

3.1 Introduction
This chapter presents the methodology that was employed for data gathering as well as the relevant statistical analytical tools for the analysis. Survey methods were used in carrying out the study. The data was collected using questionnaires. The following items have received specific attention in this chapter: research design, the area of study, target population, sample size, sampling technique, methods and instruments of data collection, validity and reliability and data management and analysis.

3.2 Research Design
This study adopted the quantitative survey as its research design/approach. According to Ahiadeke (2008) survey research is a data collection method which requires asking people, referred to as respondents for information using either verbal or written questions. These respondents are normally people who have certain information or have experienced certain phenomena or participated in a social process that interest the researcher and hence satisfy the research objectives/questions (Ahiadeke, 2008).

According to Neuman (2007) survey uses instruments such as questionnaires and interviews to gather information from groups of subjects and permits the researcher to summarize the characteristics of different groups or to measure their attitudes and opinions toward some issue. Similarly, Fisher (2010) noted that when researchers try to obtain a broad and representative overview of a situation, then the survey approach would be appropriate. Therefore, the survey was considered appropriate because it is the best method to describe the characteristics,
perceptions and preferences of the group under study. It also gives the respondents the opportunity to respond to the questions asked as much as they know.

3.3 Area of study
The study was conducted in Nsawam in the Nsawam Adoagyiri Municipality of the Eastern Region of Ghana. It is approximately 40 km northwest from the capital, Accra. It is also known as the 'Bread Capital of the World' because the main occupation of the women is to bake bread and sell to travelers on the main road from Accra to Kumasi, and to other destinations. Agricultural activities in the district centre mainly on non-traditional crops, such as pineapples, papaw, pepper, garden eggs and sunflower, which are cultivated mainly for export. This means there exists lots of potential for export earnings accruable to investors. Pineapple, the leading crop produced in the district, accounted for some 60% of total national pineapple export earnings of about US$12.7 million in 2005 (Ghana Export Promotion Authority, 2008). The district also produces about 55% of the total quantity of pawpaw exported out of the country. Indeed there are many industrial activities going on in the district, particularly at Nsawam, Dobro, and Adoagyiri. These cover a diversified range, from pharmaceuticals and fruit processing involving the use of high technology equipment, to artifacts and other craftworks which are produced using just a few tools. One of Nsawam Adoagyiri’s greatest competitive advantages is its proximity to Accra. Thus, investors can combine the advantages of setting up establishments within a municipality (such as tax incentives, and cheaper production costs), with the advantages of being within easy reach of the country’s largest metropolis, such as large size consumer market, access to regulatory authorities and proximity to Ghana’s largest seaport. This proximity to Accra and Tema provides an excellent site as an Export Free Zone, more so since available infrastructure includes water, electricity, telecommunications facilities and a good road network.
3.3 Target Population
Defined by Kumekpor (2002) as the entire group of people the researcher desires to learn about, this study’s target population are workers and management in a selected firm in the Agro-based industry in Nsawam in the Nsawam Adoagyiri Municipality of the Eastern Region of Ghana, namely, Blue Skies Products Ghana Limited. The study was conducted in this area because agricultural activities in the district is mainly on non-traditional crops, such as pineapples, papaw, pepper, garden eggs and sunflower, which are cultivated mainly for export, with high potential for export earnings accruable to investors.

3.4 Sample Size
According to Neuman (2007), the answer to the question of how large should a sample size be will depend on several factors, such as the budget of the study, the objectives of the study, and to what extent the policy recommendations will be implemented. The study selected 100 respondents from the population of workers in one Agro-based industry in Nsawam, namely, Blue Skies Products Ghana Limited. A sample size of 100 was chosen because it should be large enough to maximize the likelihood that the estimate will reflect the true parameter of the population.

3.5 Sampling Technique
A simple random sampling technique was used in the selection of respondents in the study. The researcher grouped the population into two major groups – managers and non-managers. This division was undertaken to achieve stratified sampling in order to avoid the situation where only non-managers or managers would be selected if the population is lumped together and sampled randomly. It was therefore reasoned that stratifying the respondents into these two major groups
would ensure that the views presented in the study would reflect those of both managers and non-managers.

In selecting the respondents, the researcher first got the full list of workers from the institution. The list was then stratified according to managers and non-managers with the help of one of the officers in the Human Resources Department. Thereafter, the researcher wrote out the names on pieces of paper and shuffled these names in a bowl, after which the respondents were selected according to the allocation for each category of staff. The total sample of 100 was then chosen.

3.6 Source of Data Collection
The study is descriptive in nature and the information presented was based on primary and secondary data. Primary data was collected using structured questionnaires. Secondary information was collected from various documents.

3.6.1 Primary and secondary data
The primary data for this research was realised through gathering information by questionnaires. A structured questionnaire was designed by the researcher for collecting information from Blue Skies Products Ghana Limited. The questionnaires were designed in simple, flexible and unambiguous language such that respondents could understand and answer all the questions with ease. The survey process was used to obtain data on an individual’s views, beliefs, morale and strength, among others. The questionnaires secured firsthand information from respondents. The secondary sources included; journals, books, articles and official records.
3.7 Research Instrument
The questionnaires were administered to the 100 respondents from Blue Skies Products Ghana Limited. These questionnaires were finalized after discussion with the research supervisor and after being subjected to thorough editing, taking into consideration the research questions. The chosen instruments did not only make the primary data more meaningful but also easily understood.

Both open and closed ended forms of questions were used in the design of the questionnaire. The close-ended questions helped respondents respond more easily and precisely, and helped the researcher to accumulate and summarize responses more quickly and efficiently. The open-ended questions were used to enable respondents give their own views on the topic. The questionnaire was designed as a self-administered one. This will make it convenient and easier to tabulate the responses. Taking into consideration the difficulties in interpretation, scoring and coding, an important issue here is validity and reliability. Since it is useful in social research to evaluate the questions in the questionnaire, before their use, a critical evaluation of the questions used for the study was carried out.

3.8 Data Collection Procedure
Respondents to the questionnaires were briefed on the importance of the study. Questions, which were not clear, were explained to the respondents. The data collection took a period of three weeks, in order that respondents had enough time to respond to the questionnaires.

3.9 Analysis of Data
The data in the study was analyzed descriptively. This involved the use of tables, pie chart and bar graphs to illustrate the findings of the study. Completed questionnaires were sorted, collated
and cleaned up in readiness for data inputting and its subsequent analysis. The main statistical software used for this purpose of data inputting and analysis was the IBM Statistical Package for Social Sciences (IBM SPSS, Version 20).

Since this study involved problems of agro-based industries, especially with the intent of assessing the significance of these problems, the study used the Relative Importance Index (RII) for the purpose of ranking these problems. The RII was used to establish the relative importance of the various factors relating to the establishment, operations and marketing of agro-based industry in Nsawam. The score for each factor is calculated as a weighted average of respondents’ expressed relative importance of the factor.

3.10 Pre-testing of the Instrument

Pretesting of the questionnaires was done with six employees, three from each category of respondents. The feedback from these responses fed into the corrections of the questionnaires. Content validity was used for measuring the validity of the questionnaires of this research. For this purpose, the contents of the questionnaires were prepared by referring to scientific texts, theories and other information to the subject of the present study.

3.11 Limitations

Similar to all research undertaking, this study faces practical limitations. One critical issue was the availability of funds. The financial resources available to cover transport fare, printing and other related expenses were seriously limited since personal funds were used. Also availability of ample time was severely limited. The time frame within which the study had to be conducted and findings presented is quite short. Another important limitation of the study also is that it may not
be representative, because one institutional perspective in the subject matter might not reflect that of the various companies that operate in the area. But the case study approach was adopted in spite of this limitation; because the subject matter had to be dealt with in greater detail, while obtaining data on other firms would be extremely difficult.

Bearing this in mind, it appears inexpedient for the study to select a sample size that would be too large to handle, considering the limited period of time within which the project must be completed. In practice, the complexity of the competing factors of resources and accuracy meant that the decision on a sample size was based on experience and practical judgment rather than on a strict mathematical formula. To ensure that the limitations above did not seriously affect the study, great care was exercised in the selection process in order to help achieve as much representative sample as possible. Also every effort was made to ensure validity and reliability of the data.
CHAPTER FOUR
DATA ANALYSIS AND DISCUSSION

4.0 Introduction
This chapter covers the analysis of results from the field survey. The results are presented in tables and graphs. The analysis is presented in four sections: the demographic characteristics, constraints facing the establishment of agro-based industry, factors hindering the operations of agro-business, and finally the marketing challenges encountered by agro-business firms. Thus, each section, aside the demographic information is meant to cover a key objective in this study – the establishment, operations and marketing of agro-based products.

In all one hundred (100) questionnaires, judged to be large enough for the appropriate precision and constrained by cost considerations, were distributed to respondents, with eighty-five (85) valid, representing 85% response rate. Out of this number, twenty (20) representing 23.5% were managers of Blue Skies while sixty-five (65), representing 76.5%, were non-management staff. Though the study could not recover all the questionnaires distributed, the 85% could be assumed to be representative enough to make inferences corresponding to at least the company.

4.1 Demographic Characteristics of Respondents
The following demographic characteristics of respondents were analyzed; gender, age, level of education and years of experience. Basically, the demographic data is designed to enable the study establish the background of the respondents.
4.1.1 Gender of Respondents

Figure 4.1 shows the gender distribution of the respondents. From the pie chart, it is obvious that 58 respondents (representing 68.2%) were males while 27 (representing 31.8%) were females, suggesting that management and staff working at Blue Skies Company were mostly males. This distribution may be attributed to the fact that more males are engaged in the agro business profession than females in Ghana.

**Figure 4.1: Gender of Respondents**

Source: Field work (2014)

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4.1.2 Age of Respondents

The age range of respondents has been captured in Figure 4.2 below. It can be gleaned that 18 respondents (representing 21.2%) are in the 20-25 age category, 26 (representing 30.6%) were between the ages of 26-30 years, 10 (representing 11.8%) were between 31 and 35 years and 31 (representing 36.5%) were 36 years and above. The results indicate that most of the respondents are in their active working ages.
4.1.3 Educational Background of Respondents
The analysis on the level of education indicated that 12 respondents (representing 14.1%) were secondary certificate holders, 61 (representing 71.8%) were bachelor’s degree holders and 12 (representing 14.1%) were Post-graduate degree holders. These results suggest that the majority of the respondents are well educated. The results are shown in Figure 4.3.
4.1.4 Years of Experience
The last demographic characteristic examined the number of years respondents have been working in the Agro-business industry. The results showed that, 37 respondents (representing 43.5%) have worked in the industry for the period ranging from 1 to 5 years. Also 27 of the respondents (representing 31.8%) have worked in the industry from between 6 to 10 years while 21 (representing 24.7 percent) have worked in the industry for a period ranging from 11 to 15 years. These results indicate that a high number of the respondents are well experienced in the Agro-business and, hence, would know some of the challenges facing the industry. The results are presented in Table 4.1 below.

Table 4.1: Years of service

<table>
<thead>
<tr>
<th>Years</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5 years</td>
<td>37</td>
<td>43.5</td>
</tr>
<tr>
<td>6-10 years</td>
<td>27</td>
<td>31.8</td>
</tr>
<tr>
<td>11-15 years</td>
<td>21</td>
<td>24.7</td>
</tr>
<tr>
<td>Total</td>
<td>85</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Field work (2014)

4.2 Major Constraints Facing the Establishment of Agro-Based Industry
This section attempts to identify the major constraints facing the establishment of agro-based industry, in accordance with Kulkarni and Srivastava’s (1985) argument that agro-based enterprises face challenges right from the initiation of the establishment of the firm to its operation, processing and marketing. The current study used the Relative Importance Index (RII) to rank the constraints facing the agro-based business in their establishment, enabling the researcher to rank these variables in their order of significance in the industry.
In order to examine whether there are constraints facing the establishment of agro-based industry, respondents were asked if their organization faced challenges on its establishment. As represented in Table 4.2, 40 respondents (representing 47.1%) strongly agreed that their organization faced challenges on its establishment while 14 (representing 16.5%) agreed that their organization faced challenges. However, 5 of the respondents (representing 5.9%) strongly disagreed that their organization faced such challenges, with 4 (representing 4.7%) also disagreeing. Twenty-two (22) of the respondents (representing 25.9%) were not sure if their organization faced any challenges on its establishment.

3.94, signifying that on average respondents agree that their organization faced challenges. It must however be explained that the mean value was generated by assigning scores of 1, 2, 3, 4 to the responses of the respondents.

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree</td>
<td>5</td>
<td>5.9</td>
</tr>
<tr>
<td>Disagree</td>
<td>4</td>
<td>4.7</td>
</tr>
<tr>
<td>Neutral</td>
<td>22</td>
<td>25.9</td>
</tr>
<tr>
<td>Agree</td>
<td>14</td>
<td>16.5</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>40</td>
<td>47.1</td>
</tr>
<tr>
<td>Total</td>
<td>85</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Field work (2014)

Table 4.3 is a crosstabulation of respondents’ gender versus the existence of challenges in the establishment of agro-based industries. As Table 4.3 indicates, a larger proportion of males than females agreed that there are challenges in the establishment of agro-based industries. Specifically, 15.8% males and 20.3% females agreed; 49.6% males and 32.7% strongly agreed;
4.6% males and 13% females strongly disagreed while 4% males disagreed and 8.5% of the females also disagreed that agro-based industries face challenges in their establishment.

Table 4.3: Gender and opinions on existence of challenges in the establishment of agro-based industries (Numbers are %)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Gender</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Challenges in Establishing the Agro-Based Company</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>4.6</td>
<td>13.0</td>
</tr>
<tr>
<td>Disagree</td>
<td>4.0</td>
<td>8.5</td>
</tr>
<tr>
<td>Neutral</td>
<td>26.0</td>
<td>25.5</td>
</tr>
<tr>
<td>Agree</td>
<td>15.8</td>
<td>20.3</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>49.6</td>
<td>32.7</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Field work (2014)

Table 4.4 below summarizes respondents’ views on three variables. With respect to the first variable, funding and interest rate, the majority of the respondents (62.4%) strongly agreed it posed a major challenge to the establishment of agro-business industry while 18 (representing 21.2%) agreed. However, 14 of the respondents (representing 16.5%) were neutral. With a mean score of 4.46, it can be said that on the average respondents strongly agree that inadequate funding and high interest rate on lending capital represented a major challenge to the establishment of agro-business industry.

On the second variable, adherence to strict environmental rules, 27 respondents (representing 31.8%) agreed that it posed a challenge while 20 (representing 23.5%) strongly agreed. On the other hand, 5 respondents (representing 5.9%) strongly disagreed that the environmental requirements was a challenge while 20 (representing 23.5%) disagreed. Thus, a total of 29.4% disagreed while 55.3% agreed that environmental requirements posed a challenge. Thirteen (13) respondents, who made up 15.3% stood neutral on this variable. With a mean score of 3.44, it
may be concluded that respondents see the environmental requirements as a challenge in the establishment of agro based industries in Nsawam. This observation confirms the findings made by Grant (1998) and Goffee and Jones (1996) that pressure to preserve the environment has halted some agro-infrastructure projects and land development.

On the third variable, capacity of agro-based industries through the attendance of resourceful forums, 14 respondents (representing 16.5%) disagreed that it poses a challenge in the establishment of agro-business industry while 53, which represented 62.3%, agreed that indeed this lack of capacity-building poses a challenge, with 9 respondents strongly agreeing 9 (representing 10.6%) neutral. The mean score of 3.67 suggests that on the average respondents agreed that failure to plan for regular participation in resourceful forums and business programmes is a challenge in the establishment of agro-business.

The above challenges confirm similar challenges identified by Barrett et al (2010) and Evans and Wurster (2000), who argued that inadequate capacity building in most agro-business firms were detrimental to their sustenance, productivity and marketing performance. Also, Wilkinson and Rocha (2008) corroborated this finding in their study, noting that the limited scale of operations of Ghanaian agro-based industries, relative to the cost of participation/capacity-building forums, is disproportionate when compared to large firms, making it uneconomical for the former to undertake such training.

Table 4.4: Constraints facing the establishment of agro-based industry

<table>
<thead>
<tr>
<th>Constraints</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Freq</td>
<td>%</td>
<td>Freq</td>
<td>%</td>
<td>Freq</td>
<td>%</td>
</tr>
<tr>
<td>Inadequate funds and high interest rate on lending capital</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>14</td>
<td>16.5</td>
</tr>
<tr>
<td>Strict environmental rules</td>
<td>5</td>
<td>5.9</td>
<td>20</td>
<td>23.5</td>
<td>13</td>
<td>15.3</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>---</td>
<td>-----</td>
<td>----</td>
<td>------</td>
<td>----</td>
<td>------</td>
</tr>
<tr>
<td>Failure to plan for regular participation in resourceful forums</td>
<td>-</td>
<td>-</td>
<td>14</td>
<td>16.5</td>
<td>9</td>
<td>10.6</td>
</tr>
</tbody>
</table>

**Source:** Field work (2014)

In an attempt to identify some other constraints facing the establishment of agro-based industry, the relative importance index method was employed. Based on the RII ranking (R) of the weighted average of the relative importance indices (RII) in Table 4.4, it was observed that the most significant constraints identified by respondents were the depreciation of the Cedi and other micro-economic issues (RII=0.776), followed closely by limited access to credit, and then high interest rates and fluctuating exchange rates (RII=0.756). These funding and micro-economic issues then represent the biggest challenge.

Other major challenges, as ranked in the study, were high transportation costs (RII=0.741), the lack of support facilities (RII=0.735) and raw materials of poor quality and unreliable supply (RII=0.715). From the table below it was also observed that the least ranked constraint identified by respondents was poor trade policy (RII=0.641), with export and import taxes on raw materials (0.662) and bureaucratic practices (0.647) also receiving low rankings of importance.
Table 4.5: Significant constraints facing the establishment of agro-based industry

<table>
<thead>
<tr>
<th>Constraints facing the establishment of Agro-business Industry</th>
<th>RII</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depreciation of the Cedi and other micro-economic issues (e.g., cost of production, consumer choice and competition)</td>
<td>0.776</td>
<td>1</td>
</tr>
<tr>
<td>Limited access to credit, high interest rates and fluctuating exchange rates</td>
<td>0.756</td>
<td>2</td>
</tr>
<tr>
<td>High transportation costs</td>
<td>0.741</td>
<td>3</td>
</tr>
<tr>
<td>The lack of support facilities</td>
<td>0.735</td>
<td>4</td>
</tr>
<tr>
<td>Raw materials of poor quality and unreliable supply</td>
<td>0.715</td>
<td>5</td>
</tr>
<tr>
<td>International trade barriers</td>
<td>0.688</td>
<td>6</td>
</tr>
<tr>
<td>The lack of professional managers</td>
<td>0.673</td>
<td>7</td>
</tr>
<tr>
<td>Government Bureaucracies</td>
<td>0.673</td>
<td>7</td>
</tr>
<tr>
<td>Export and import taxes on raw materials</td>
<td>0.662</td>
<td>9</td>
</tr>
<tr>
<td>Bureaucratic practices of corporate organisations</td>
<td>0.647</td>
<td>10</td>
</tr>
<tr>
<td>Poor trade policy</td>
<td>0.641</td>
<td>11</td>
</tr>
</tbody>
</table>

Source: Field work (2014)

In essence, it may be concluded from the above results that the topmost five constraints facing the establishment of agro-based industry are depreciation of the Cedi and other micro-economic issues, limited access to credit, high interest rates and fluctuating exchange rates, high transportation costs, lack of support facilities and raw materials of poor quality and unreliable supply.

The challenge of funding confirms several empirical findings. Ousmane (2008) found that one major challenge facing the establishment of an agro-business firm is inadequate funding and high interest rates on lending capital. Aune and Andre (2008) also note that high interest charges on bank loans greatly restrict most agro-businesses, especially in competition with the well-established non-agro-businesses.
4.3 Factors Hindering the Operations of Agro-Business Industry

This section assesses the factors that hinder the operations of agro-business. Both managers and non-managers were asked in the questionnaire if agro-based industries face routine problems in their business operations. Out of the 85 respondents, 24 (representing 28.2%) strongly agreed and 26 (representing 30.6%) agreed that agro-based industries face routine problems in their operations. However, 10 (representing 11.8%) disagreed and 25 (representing 29.4%) were not sure. The mean score was 3.75, suggesting that on the average respondents agreed that agro-based industries face routine problems in their business operations, confirming similar findings by Bandarla (1991), Evans and Wurster (2000), Goffee and Jones (1996), Porter (1996) and Barett et al. (2010). Details of these results are captured in Table 4.5 below.

Table 4.6: Problems faced by agro-based industries in their routine operations

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disagree</td>
<td>10</td>
<td>11.8</td>
<td>3.75</td>
</tr>
<tr>
<td>Neutral</td>
<td>25</td>
<td>29.4</td>
<td></td>
</tr>
<tr>
<td>Agree</td>
<td>26</td>
<td>30.6</td>
<td></td>
</tr>
<tr>
<td>Strongly agree</td>
<td>24</td>
<td>28.2</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>85</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Source: Field work (2014)

Table 4.7 is a crosstabulation of respondents’ gender and the problems faced by agro-based industries in their routine operations. Table 4.7 shows that 11.8% males and 11.7% female strongly disagreed while 24.4% males and 27.8% females disagreed that agro-based industries face challenges in their routine operations. Thus a cumulative 36.2% males and 39.5% females disagreed that agro-based industries face challenges in their routine operations. On the other hand, 28.2% males and 28.2% females respectively agreed that agro-based industries face challenges in their routine operation while 8.5% and 10.3% males and females strongly agreed on the same variable. Thus a cumulative 36.7% males and 38.5% females agreed to the
challenges face in routine operations. Overall, 70.9% males responded to the question while the females were 29.1%.

Table 4.7: Crosstabulation of respondents’ gender and problems faced in agro-based companies in their routine operations

<table>
<thead>
<tr>
<th>Variable</th>
<th>Gender</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Challenges faced in Routine Operations</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>11.8</td>
<td>11.7</td>
<td>11.8</td>
<td></td>
</tr>
<tr>
<td>Disagree</td>
<td>24.4</td>
<td>27.8</td>
<td>25.4</td>
<td></td>
</tr>
<tr>
<td>Neutral</td>
<td>27.1</td>
<td>22.0</td>
<td>25.6</td>
<td></td>
</tr>
<tr>
<td>Agree</td>
<td>28.2</td>
<td>28.2</td>
<td>28.2</td>
<td></td>
</tr>
<tr>
<td>Strongly agree</td>
<td>8.5</td>
<td>10.3</td>
<td>9.0</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Source: Field work (2014)

In an attempt to identify the specific problems facing the operations of agro-business, respondents were asked to indicate their level of agreement or disagreement to statements on specified operational challenges. From Table 4.8, 11 respondents (representing 12.9%) strongly disagreed, that ‘failure of agro-business enterprises to exploit and expand their capacities and competences to maintain strategic competitive advantage retard their operations’ and 42 (representing 49.4%) disagreed. It is noted that only 19 (representing 22.4%) agreed and 13 (representing 15.3%) were not sure. A mean score of 2.47 suggests that on the average respondents disagree, that ‘failure of agro-business enterprises to exploit and expand their capacities and competences to maintain strategic competitive advantage retard their operations’.

These results seem at variance with several of the existing studies, e.g., Srivastava (1989) and Chadha (1989). Srivastava (1989) noted that 30% of harvested fruits and vegetables get lost in the process of handling, processing and marketing by agro-based industries, as a result of the limited capacity of those industries. Likewise, Chadha (1989) found that the lack of capacity to process varieties of fruits and vegetables, the short period of raw materials availability and
excessive costs of raw materials are the important constraints for the development of agro-businesses. In fact, in the specific case of Ghana, it has been observed that only a small percentage (about 1.5%) of the fruits and vegetable produced in Ghana are processed (Srivastava 1989), which leads one to question if these agro-based workers are not aware of the industry’s limited capacities.

Also majority of the respondents (representing 32.9%) agreed that labour deficit greatly affects the routine operations of agro-business firms and 9 (representing 10.6%) strongly agreed. However, 4 (representing 4.7%) strongly disagreed and 19 (representing 22.4%) disagreed. A whopping number of 25 respondents (representing 29.4%) were not sure if labour deficit greatly affects the routine operations of agro-business firms. The mean score obtained was 3.22 and this suggests that, on the average, respondents were not too certain if labour deficit greatly affects the routine operations of agro-business firms.

Bandarla’s (1991) findings and indeed those of other authors did not agree with the findings that there is labour deficit in agro-based industries. However, Bandarla (1991) noted that there is the dearth of technical knowhow or knowledge when it comes to the management of agro-based industries. This gives the impression that labour might be abundant, but quality manpower is quite lacking in the management of these industries. This point is also emphasized by Evans and Wurster (2000) who observed that the shortage of skilled labour (especially, in the rural areas) to manage machinery and equipment that are highly costly, posing a huge challenge to the operations of agro-based companies. Jules (2006) displayed an insightful understanding of this challenge when he stated that more often than not, agro-businesses are able to determine the current skill levels needed in their daily operations, but fail to determine the capacities and competencies needed to successfully compete in the future.
Table 4.8: Problems facing the operations of agro-business

<table>
<thead>
<tr>
<th>Factors</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Freq.</td>
<td>%</td>
<td>Freq.</td>
<td>%</td>
<td>Freq.</td>
<td>%</td>
</tr>
<tr>
<td>Failure of Agro-business to exploit and expand their capabilities and competencies</td>
<td>11</td>
<td>12.9</td>
<td>42</td>
<td>49.4</td>
<td>13</td>
<td>15.3</td>
</tr>
<tr>
<td>Labour deficit</td>
<td>4</td>
<td>4.7</td>
<td>19</td>
<td>22.4</td>
<td>25</td>
<td>29.4</td>
</tr>
</tbody>
</table>

Source: Field work (2014)

In a bid to learn about the relative importance of the various operational hindrances, RII was computed, with the results summarized in Table 4.9. It is obvious from this table that the most important problem identified by respondents was the depreciation of the Cedi and other micro-economic issues (RII=0.809), followed by inconsistent power supply (RII=0.773), insufficient supply of raw materials (RII=0.709). Aside these three, which represented the three highest ranked, others were the lack of a bigger market to sell produce (RII=0.688), port charges/high clearing charges (0.685) and absence of good management of the processing facility (RII=0.682) as major challenges as well. However, the least ranked problem identified by respondents were telecommunication challenges (0.601), road network/congestions (0.596) and the poor and inconsistent quality of processed products (RII=0.581). The other bottom ranked variables were the absence of good management of the processing facility (0.682) and the lack of technical support for the enterprise (0.60).

Table 4.9: Significant problems facing the operations of agro-based industries

<table>
<thead>
<tr>
<th>Problems facing the operations of Agro-business</th>
<th>RII</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depreciation of the Cedi and other micro-economic issues (e.g., cost of production, consumer choice and competition)</td>
<td>0.809</td>
<td>1</td>
</tr>
<tr>
<td>Problem</td>
<td>Score</td>
<td>Rank</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>-------</td>
<td>------</td>
</tr>
<tr>
<td>Inconsistent power supply</td>
<td>0.773</td>
<td>2</td>
</tr>
<tr>
<td>Insufficient supply of raw materials</td>
<td>0.709</td>
<td>3</td>
</tr>
<tr>
<td>Lack of bigger market to sell produces</td>
<td>0.688</td>
<td>4</td>
</tr>
<tr>
<td>Port congestion/high clearing charges</td>
<td>0.685</td>
<td>5</td>
</tr>
<tr>
<td>Absence of good management of the processing facility</td>
<td>0.682</td>
<td>6</td>
</tr>
<tr>
<td>Lack of technical support for the enterprise</td>
<td>0.610</td>
<td>7</td>
</tr>
<tr>
<td>Telecommunication challenges</td>
<td>0.601</td>
<td>8</td>
</tr>
<tr>
<td>Road network/Congestions</td>
<td>0.596</td>
<td>9</td>
</tr>
<tr>
<td>Poor and inconsistent quality of processed products</td>
<td>0.581</td>
<td>10</td>
</tr>
</tbody>
</table>

Source: Field work (2014)

Thus, from Table 4.9, it can be observed that the top five problems facing the operations of agro-business are depreciation of the Cedi and other micro-economic issues, inconsistent power supply, insufficient supply of raw materials, lack of bigger market to sell produces, and port congestion/high clearing charges. The list above was not confirmed by those outlined by Bandarla (1991), for instance, who noted that the major challenges facing the operations of agro-based industries were: poor organizational structure, poor production and distribution channels, low technical know-how, inadequate training, poor industrial relations, and inadequacy of management. Similarly, the findings were misaligned with those of Evans and Wurster (2000), Goffee and Jones (1996), These authors noted that the biggest challenge in the operations of agro-based industries were the inability to develop a realistic assessment of the capability and capacity of the firm or industry, inability to grasp their core competencies, competitive advantage, pin pointing unproductive areas in their value chain and lack of requisite expertise.
However, the most important operational challenge, depreciation of the local currency and microeconomic issues, were confirmed in the study of Grant (1998). Grant noted that a major obstruction to agro-business operation has been the rise in foreign currencies and thus, high instability of the foreign currencies greatly impinge the financial operations of agro-businesses which mostly rely on seasonal produce.

4.4 Marketing Challenges Facing Agro-business Firms

This section examines the marketing challenges. Table 4.10 shows that 13 respondents (representing 15.3%) strongly agreed that agro-based businesses encounter challenges in the marketing of their products and 41 (representing 48.2%) agreed. On the contrary, 18 of the respondents (representing 21.2%) disagreed and 13 (representing 15.3%) were neutral. A mean score of 3.58 suggests that on the average respondents agree that agro-businesses encounter challenges in the marketing of their products. These results confirm those of Restuccia et al. (2007), Porter (1996), Sonka (2002) and Abbott et al. (2001)

Table 4.10: Marketing problems faced by agro-based industry

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disagree</td>
<td>18</td>
<td>21.2</td>
<td>3.58</td>
</tr>
<tr>
<td>Neutral</td>
<td>13</td>
<td>15.3</td>
<td></td>
</tr>
<tr>
<td>Agree</td>
<td>41</td>
<td>48.2</td>
<td></td>
</tr>
<tr>
<td>Strongly agree</td>
<td>13</td>
<td>15.3</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>85</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Source: Field work (2014)

Table 4.11 is a crosstabulation of respondents gender and the marketing challenges faced by agro-based industries. It is obvious in Table 4.11 that 24.8% males and 11.2% females disagreed that agro-based companies face marketing challenges, while 45.2% and 56.6% males and
females respectively agreed that agro-based industries face challenges in their marketing. Also, 15% male and 16.1% females strongly agreed that agro-based industries face challenges in their marketing making a greater number agree that these industries face challenges in their marketing. Both males and females agreed that agro-based industries face challenges in their marketing. Overall, 73.3% males responded to the question while the females were 26.7%.

Table 4.11: Cross tabulation of respondents gender and marketing problems faced by agro-based industry

<table>
<thead>
<tr>
<th>Variable</th>
<th>Gender</th>
<th></th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disagree</td>
<td>24.8</td>
<td>11.2</td>
<td>21.2</td>
<td></td>
</tr>
<tr>
<td>Neutral</td>
<td>15.0</td>
<td>16.1</td>
<td>15.3</td>
<td></td>
</tr>
<tr>
<td>Agree</td>
<td>45.2</td>
<td>56.6</td>
<td>48.2</td>
<td></td>
</tr>
<tr>
<td>Strongly agree</td>
<td>15.0</td>
<td>16.1</td>
<td>15.3</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Source: Field work (2014)

In order to identify which of the marketing challenges were more significant than others, the RII was computed. The computed figures, which have been summarized in Table 4.12, show that the most significant problem identified by respondents was the depreciation of the Cedi and other micro-economic issues (RII=0.809), Lack of bigger market to sell produce (RII=0.732), the financial markets (RII=0.703) and Failure to adapt to changes (RII=0.694). However, the least ranked problem identified by respondents was the changing customer satisfaction (RII=0.60), the emerging competitive environment (0.647) and the failure to search out for prospective market niches (0.679)

Table 4.12: Significant problems facing the marketing of agro-business products

<table>
<thead>
<tr>
<th>Variable</th>
<th>RII</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depreciation of the Cedi and other micro-economic issues (e.g.,</td>
<td>0.809</td>
<td>1</td>
</tr>
<tr>
<td>cost of production, consumer choice and competition)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Problem</td>
<td>Score</td>
<td>Rank</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>-------</td>
<td>------</td>
</tr>
<tr>
<td>Lack of bigger market to sell produce</td>
<td>0.732</td>
<td>3</td>
</tr>
<tr>
<td>The financial markets</td>
<td>0.703</td>
<td>4</td>
</tr>
<tr>
<td>Failure to adapt to changes</td>
<td>0.694</td>
<td>5</td>
</tr>
<tr>
<td>Failure to search out for prospective market niches</td>
<td>0.679</td>
<td>6</td>
</tr>
<tr>
<td>The emerging competitive environment</td>
<td>0.647</td>
<td>7</td>
</tr>
<tr>
<td>The changing customer satisfaction</td>
<td>0.60</td>
<td>8</td>
</tr>
</tbody>
</table>

**Source: Field work (2014)**

In sum, respondents identified that the top four problems facing marketing of agro-business products are depreciation of the Cedi and other micro-economic issues (cost of production, consumer choice and competition), lack of bigger market to sell produce, problems associated with the financial markets and failure to adapt to changes. Porter (1996) on the other hand identified the major marketing challenges in agro-based industries as inability to accurately identify its competitive advantages, understand the market trend, identify customer relationships, and provide quality and adequate services to its customers which greatly thwart their products marketability and profit margins. Porter’s findings were however made in a developed countries’ operating environments which are apparently quite different from developing countries. For example, exchange rate instability would likely be less of a problem. This difference might explain why the findings of the present study were not confirmed by Porter’s. A similar explanation might hold as well regarding the findings of Abbott et al. (2001) who identified the major marketing challenges confronting the agro-business industry to be the inability to adapt to changes.
CHAPTER FIVE
SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.2 Summary
The study was designed to assess the problems faced by agro-based businesses, using a case study of Blue Skies Products Ghana Limited located in Nsawam. The researcher observed from the review of the literature that agro processing offers great scope for conversion of farm produce to consumer commodities and in the process reducing wastage, and increasing shelf-life resulting in value addition and higher income transfer to farmers (Chengappa, 2004). Accordingly, agro-industries have also been viewed as a safety valve that needs to be built within rural areas to absorb surplus labour and provide relief to the problem of large scale-disguised unemployment. In addition, it has been noted that agro-business provides the crucial industry linkages which helps accelerate agricultural development by creating backward linkages (supply of credit, inputs and other production enhancement services) and forward linkages (processing and marketing), adding value to the farmers’ produce, generating employment opportunities, and increasing the net income of farmers (Srivastava, 1989). Consequently, this study was designed to identify the major constraints regarding agro-business establishment, operation and marketing, as evidenced by Blue Skies in Nsawam.

The study adopted the quantitative survey as its research design/approach, which according to Ahiadeke (2008) is a data collection method which requires asking people, referred to as respondents for information using either verbal or written questions. The study chose Blue Skies, a thriving agro-based industries located in Nsawam for its case study. As a result, the study selected its respondents from this company. The respondents comprised managers and non-managers in the company who were selected with the simple random sampling method. One hundred (100) respondents were targeted in the study but the researcher recovered 85. Thus, the
analysis and conclusions in the study are based on the responses provided by these 85 respondents. Consistent with the objectives of the study, the problems of agro-based industries were grouped under three thematic areas – problems faced during establishment, problems faced in operations and problems faced in marketing. The findings will therefore be presented along these themes.

Under the problems associated with establishment, the study found that agro-based companies encounter significant problems in their establishment. Rank wise, the biggest challenges were the depreciation of the Cedi and other micro-economic issues, limited access to credit, high interest rates and fluctuating exchange rates, high transportation costs, lack of support facilities and raw materials of poor quality and unreliable supply while the three least significant challenges were export and import taxes on raw materials, bureaucratic practices and poor trade policy. While the five major challenges, especially the first three, were confirmed by several findings in the literature (Ousmane, 2008; Aune & Andre, 2008), the bottom three contradicted some empirical evidence (Feder et al., 2003; Beintema & Gert-jan, 2008).

With a mean score of 3.75, the study also found that agro-based industries face significant challenges in their operations, confirming the empirical position of Bandarla (1991), Evans and Wurster (2000), Goffee and Jones (1996), Porter (1996) and Barett et al. (2010). The most significant problems faced were depreciation of the Cedi and other micro-economic issues, inconsistent power supply, insufficient supply of raw materials, lack of bigger market to sell produces and port congestion/high clearing charge while the least significant problems were the absence of good management of the processing facility, lack of technical support for the enterprise, and poor and inconsistent quality of processed products. Other equally operational
challenges, albeit lowly rated were telecommunication challenges and road network/Congestions.

Ironically, the significant challenges identified in the present study do not run in tandem to those identified in the empirical literature probably due to different settings of study areas, as in the studies undertaken by Bandarla (1991), Evans and Wurster (2000), Goffee and Jones (1996). These authors had the lack of introspection as the most significant challenge facing agro-based industries. The challenge associated with the deprecation of currency and difficult micro-economic environment were however confirmed by Grant (1998).

Finally, with a mean score of 3.58, the study concluded that there are challenges associated with the marketing activities of agro-business, confirming a similar stance by Restuccia et al. (2007), Porter (1996), Sonka (2002) and Abbott et al. (2001). When the marketing-related challenges were ranked, the depreciation of the Cedi and other micro-economic issues, and the lack of a bigger market to sell produce emerged as the most important attribute. “financial markets”, “failure to adapt to changes”, “the failure to search out for prospective market niches”, “emerging competitive environment” and the changing customer satisfaction followed each other closely. Several studies have been conducted along these lines, including those of Christensen (1997), Akridge et al. (2000), Erickson et al., 2002) and Grant (1998), Porter (1996). It was however noted that these studies were undertaken in developed nations which have different operating environments than those of Ghana, which is a developing country. The difference between these findings and those of the present study could therefore be attributed to the different settings of the empirical studies and the present study.
5.3 Conclusions
The following conclusions can be drawn from the current study:

On the major problems faced by agro-based industries in their establishment, the depreciation of the Cedi and other micro-economic issues (cost of production, price determination and consumer choice), limited access to credit, high interest rates and fluctuating exchange rates, high transportation costs, lack of support facilities and raw materials of poor quality and unreliable supply are significant issues that need to be tackled first in the bid to encourage the establishment of agro-based industries while export and import taxes on raw materials, bureaucratic practices and poor trade policy are issues that could be tackled later.

On the major problems faced by agro-based industries in their operations, the most significant problems faced are depreciation of the Cedi and other micro-economic issues, inconsistent power supply, insufficient supply of raw materials, lack of bigger market to sell produce and port congestion/high clearing charges. The least significant problems are the absence of good management of the processing facility, lack of technical support for the enterprise, and poor and inconsistent quality of processed products.

On the major challenges faced by agro-based industries in their marketing activities, the depreciation of the Cedi and other micro-economic issues and the lack of a bigger market to sell produce emerged as the most important attribute. Lack of financial markets, failure to adapt to changes, and the failure to search out for prospective market niches followed closely. Emerging competitive environment and the changing customer satisfaction were regarded as the least significant problems faced in marketing agro-based industries.
5.4 Recommendations
In the light of the findings and conclusions, the following policy recommendations follow from the study-(to address the establishment, production and marketing challenges associated with agro-business in Ghana):

- Depreciation of the cedi and other micro-economic issues such as competition and cost of production, fluctuating exchange rate, and high interest rate are major issues that need to be addressed in order to promote the establishment of agro-based industries in Ghana. The depreciation of the Cedi should be addressed through a regulatory framework that ensures that the country earns more foreign exchange into the country. Among other factors, the government can incentivize manufacturing companies to increase their export volumes and at the same time ensure that non-traditional exports are encouraged in order to increase the country’s balance of trade and earn more foreign exchange to strengthen the local currency. For example, concessions should be given by the central bank to agro-industries for lower interest rates and operating cost. Competition and cost of production can however be addressed at the level of the institution. This will entail Blue Skies identifying the competitive forces in the local and international market, noting its strength and weaknesses and determining the means to create a competitive advantage for the institution.

- Limited access to credit could be partly addressed through the establishment and transparent operation of entrepreneurship funds such as the Youth Enterprise Support (YES) or creating a favourable environment for banks to lend below the market rate to the manufacturing industry through special fund set up by the government specifically for agro-industries.
• Port congestion and high clearing charges could be addressed through a staggered charging system that ensures that goods that are left within a certain time range is confiscated and auctioned. In addition, space could be designated in the port for manufacturing firms to use which ensures that the general congestion in the system is avoided. Moreover, the charging system could be reviewed in favour of manufacturing firms that undertake a certain volume of exports per year.

• Agro-based industries can improve their market share by ensuring they produce quality products with a definite edge over those of competitors. In addition, they can create a competitive advantage by adding other products that address the different tastes or preferences of their customers.

• Government should, as a matter of urgency, solve the frequent power outages and the foreign exchange problems in order to position agro-based industries to be efficient in the delivery of quality products, and to improve employment for young people.
ASSESSMENT OF PROBLEMS FACED BY AGRO-BASED INDUSTRIES: A CASE STUDY OF NSAWAM

Dear Respondent,

Please, a study is been conducted on the above topic and would be very grateful if you could respond to the questions developed below. Please, your identity would by no means be revealed in any form; therefore, be at liberty to complete the questionnaire with independent and objective judgment. Information provided shall be treated strictly confidential and for academic purpose only.

Thank you.

**SECTION A: Demographical Data of Respondents**

This section of the questionnaire refers to the background or biographical information. Although, the researcher is aware of the sensitivity of the questions in this section, the information provided would allow comparison of groups of respondents. Once again it is assured that your response would remain anonymous.

1. Gender:  
   a. Male [  ]  
   b. Female [  ]

2. Age group:  
   a. 20 – 25 [  ]  
   b. 26 – 30 [  ]  
   c. 31 – 35 [  ]  
   d. 36 and above [  ]

3. Educational background  
   a. Basic [  ]  
   b. Secondary [  ]  
   c. Degree [  ]  
   d. Post-Degree [  ]  
   e. Others (specify).................................................................

4. Category  
   a. Management [  ]  
   b. Staff [  ]

5. Years of service  
   a. 1-5 years [  ]  
   b. 6-10 years [  ]  
   c. 11-15 years [  ]  
   d. 16 years and above [  ]

6. Company/Organization..........................................................................................................

**Instructions:** Please tick [  ] the box that best represents your view or state where appropriate.
SECTION B: This section identifies the major constraints facing the establishment of agro-business industry in Nsawam

7. Does the agro-business industries in Nsawam face challenges in their establishment?
   a. Yes [ ]   b. No [ ]   c. Do not know [ ]

8. If yes, what are some of the major challenges facing the industry?

9. Inadequate funding and high interest rate on lending capital are major challenges to the establishment of agro-business industry in Nsawam
   a. Strongly Agree [ ]   b. Agree [ ]   c. Neutral [ ]   d. Disagree [ ]   e. Strongly Disagree [ ]

10. Strict environmental rules such as land reserves being set by land users or developers restrict the establishment of agro-businesses
   a. Strongly Agree [ ]   b. Agree [ ]   c. Neutral [ ]   d. Disagree [ ]   e. Strongly Disagree [ ]

11. Does failure to plan for regular participation in resourceful forums and business programs lead to poor establishment and growth of agro-business industry?
    a. Yes [ ]   b. No [ ]   c. Do not know [ ]

12. **Table 1.0:** Please rank the level of significance of the following problems facing the establishment of agro-business industry in Nsawam.

<table>
<thead>
<tr>
<th>Problem Facing the Establishment of Agro-business Industry</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>International trade barriers</td>
<td></td>
</tr>
<tr>
<td>Limited access to credit, high interest rates and fluctuating exchange rates</td>
<td></td>
</tr>
<tr>
<td>Poor trade policy</td>
<td></td>
</tr>
<tr>
<td>Export and import taxes on raw materials</td>
<td></td>
</tr>
<tr>
<td>Bureaucratic practices</td>
<td></td>
</tr>
<tr>
<td>High transportation costs</td>
<td></td>
</tr>
<tr>
<td>Raw materials of poor quality and unreliable supply</td>
<td></td>
</tr>
<tr>
<td>The lack of support facilities</td>
<td></td>
</tr>
<tr>
<td>The lack of professional managers</td>
<td></td>
</tr>
<tr>
<td>Land tenure system</td>
<td></td>
</tr>
<tr>
<td>Depreciation of the cedi and other micro-economic issues (cost of production, consumer choice and competition)</td>
<td></td>
</tr>
<tr>
<td>Government bureaucracies</td>
<td></td>
</tr>
</tbody>
</table>

**Scale:** 1 = Highly Significant; 2 = Significant; 3 = Neutral; 4 = Non-significant; 5 = Highly non-significant.

**SECTION C: This section assesses the factors that hinder the operations of agro-businesses in Nsawam**

13. Does the agro-business enterprises in Nsawam face problems in their routine operations?
   a. Yes [ ]   b. No [ ]   c. Do not know [ ]

14. If yes, what are some of the prime problems hindering their routine operations?
   …………………………………………………………………………………………………………………
   …………………………………………………………………………………………………………………
   …………………………………………………………………………………………………………………
   …………………………………………………………………………………………………………………
   …………………………………………………………………………………………………………………

15. Failure of agro-business enterprises in Nsawam to exploit and expand their capacities and competencies to maintain strategic competitive advantage retard their operations
   a. Strongly Agree [ ]   b. Agree [ ]   c. Neutral [ ]   d. Disagree [ ]   e. Strongly Disagree [ ]

16. Does labour deficit greatly affects the routine operations of agro-business firms in Nsawam?
17. **Table 2.0**: Please rank the level of significance of the following constraints facing the routine operations of agro-business enterprises in Nsawam.

<table>
<thead>
<tr>
<th>Problem Facing the Operations of Agro-business Enterprises</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Insufficient supply of raw materials</td>
<td></td>
</tr>
<tr>
<td>Poor and inconsistent quality of processed products</td>
<td></td>
</tr>
<tr>
<td>Lack of technical support for the enterprise</td>
<td></td>
</tr>
<tr>
<td>Absence of good management of the processing facility</td>
<td></td>
</tr>
<tr>
<td>Inconsistent power supply</td>
<td></td>
</tr>
<tr>
<td>Depreciation of the Cedi and other micro-economic issues (cost of production, consumer choice and competition)</td>
<td></td>
</tr>
<tr>
<td>Lack of bigger market to sell produces</td>
<td></td>
</tr>
<tr>
<td>Road network/Congestion</td>
<td></td>
</tr>
<tr>
<td>Port congestion/High clearing charges</td>
<td></td>
</tr>
<tr>
<td>Telecommunication challenges</td>
<td></td>
</tr>
</tbody>
</table>

*Scale:* 5 = Highly Significant; 4 = Significant; 3 = Neutral; 2 = Non-significant; 1 = Highly non-significant.

**SECTION D:** This section ascertains the marketing challenges encountered by agro-business firms in Nsawam.

18. Do agro-business firms in Nsawam encounter challenges in the marketing of their products?
   a. Yes [   ]  b. No [   ]  c. Do not know [   ]

19. If yes, what are some of the major challenges encountered?

........................................................................................................................................................................
........................................................................................................................................................................
........................................................................................................................................................................
20. Failure to add value and differentiate products of agro-business firms greatly affect their marketing power. a. Strongly Agree [    ]    b. Agree [    ]    c. Neutral [    ]
    d. Disagree [    ]    e. Strongly Disagree [    ]

21. Table 3.0: Please rank the level of significance of the following problems facing the marketing of agro-business products in Nsawam.

<table>
<thead>
<tr>
<th>Problem Facing the Marketing of Agro-business Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>The emerging competitive environment</td>
</tr>
<tr>
<td>The changing customer satisfaction</td>
</tr>
<tr>
<td>The financial markets</td>
</tr>
<tr>
<td>Failure to adapt to changes</td>
</tr>
<tr>
<td>Failure to search out for prospective market niches</td>
</tr>
<tr>
<td>Depreciation of the Cedi and other micro-economic issues (cost of production, consumer choice and competition)</td>
</tr>
<tr>
<td>Lack of bigger market to sell produces</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>5</td>
</tr>
</tbody>
</table>

**Scale:** 5 = Highly Significant; 4 = Significant; 3 = Neutral; 2 = Non-significant; 1 = Highly non-significant.

Thank you for completing this questionnaire.


Akridge, J. T., T. Funk, L. Whipker, W. D. Downey, and M. Boehlje. (2000). “Commercial producers: Making choices; driving change.” Center for Agricultural Business, Purdue University, West Lafayette, IN.


Hussain, N. and Ahmad, B. (2000). “Farmers’ Organization Authority and Its Role in Rural Development through the Farmers’ Organization”, paper presented at the International
Symposium on New Approaches for Farmer Organization and Agriculture Cooperatives in the New Millennium, 30 March - 1 April 2000, Langkawi, Malaysia.


