The contribution of enterprise establishment factors to employment growth of the pineapple industry in the Nsawam-Adoagyiri District in the Eastern Region of Ghana

Seth Dankyi Boateng1* and Kafui Kwesi Agbe1

1Department of Agricultural Extension. School of Agriculture. University of Ghana, Legon
*Corresponding author: sdboateng@ug.edu.gh

ABSTRACT

The establishment of enterprises is influenced by various factors identified in the theories of enterprise establishment. However, most entrepreneurs do not pay particular attention to such factors when establishing and managing their enterprises. The aim of this study is to examine how enterprise establishment factors contribute to employment growth of the pineapple industry in Nsawam-Adoagyiri District. The enterprise establishment factors investigated in this study are the basic tasks identified by the entrepreneur, availability of funds for enterprise establishment, business information and entrepreneur’s expertise from previous education and previous work. A survey was conducted using mixed methods research. Data were collected from 172 entrepreneurs in the pineapple industry from eight farmer based organizations randomly selected from Nsawam-Adoagyiri District of Ghana. The data were analyzed with SPSS software using Chi square and multiple regression analysis. The results show that availability of funds for enterprise establishment contributed significantly to employment growth. The study found that business information did not contribute to employment growth of the pineapple industry in the study area. While entrepreneurs’ expertise acquired from educational background did not contribute significantly to employment growth of the industry, entrepreneurs’ expertise from previous work background contributed significantly to employment growth. The regression analysis showed that the enterprise establishment factors investigated in this research explain 52% of the variations in employment growth in the pineapple industry in the study area. It can therefore be concluded that enterprise establishment factors do not only influence the enterprise establishment process but also contribute to employment growth of the pineapple industry in the study area.

Keywords: Employment growth, Enterprise establishment factors, Expertise and employment growth, Basic needs, Business information

Introduction

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

SME establishment involves the organization of resources in an economic environment: intellectual, human, social and financial. Entrepreneurs organize these resources to pursue market opportunities. The activities of these entrepreneurs lead to the creation of firms or enterprises.

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

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

Enterprise establishment is perceived as a way of tackling the problem of unemployment and poverty (Robson et al., 2009). The entrepreneurial process of recognising opportunities and acquiring the necessary resources to create enterprises results in the formation of micro, small and medium scale enterprises. These enterprises employ a very large percentage of the workforce in Ghana (The New Legon Observer, 2008). In Ghana, SMEs are principally in the agricultural and transport sectors (AFDB/OECD, 2005).

The agricultural sector in Ghana employs more than half (55.8%) of the workforce (Otoo et al., 2009), most of whom are engaged in both production and processing of agricultural products. This makes the sector important in employment generation. The establishment of enterprises in the agricultural sector will not only create more jobs for people in the economy, but also help control post-harvest losses in the country.

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

The growth of enterprise is seen as its development from small through medium to large scale (Mao, 2005). Numerous problems have been identified by various researchers in the field of enterprise growth as contributing to the slow growth or collapse of enterprises (Krake, 2005; Wong and Merrilees, 2005; MoFEP, 2012; Tawaih et al., 2013; Fjose et al., 2010). Access to credit, market and land, and poor corporate governance have been identified as factors affecting enterprise growth (MoFEP, 2012). Tawia et al. (2013) has argued that growth is not only affected by credit accessibility of SMEs but also by the unfavourable business environment. Fjose et al. (2010) have posited that lack of knowledge and relevant competencies constrain the growth of micro enterprises. However, these researchers have typically measured the growth of firms at the business level (Kruger, 2004), with little or no focus on factors that lead to the establishment of the enterprises.

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

Apart from entrepreneurs acquiring experience and knowledge from their previous work and educational background, many public agencies are established to assist entrepreneurs in the acquisition of skills. Some of these agencies in Ghana include the National Board for Small Scale Industries, the Association of Ghana Industries and GRATIS Foundation. In addition, other agencies which provide funding have been set up to provide the needed financial assistance to entrepreneurs for the establishment and development of their enterprises. Examples of such agencies include the Enterprise Development Fund, the Export Development and Agricultural Improvement Fund and the Skill Development Fund. However, despite the large number of agencies and funds instituted in the country for enterprise establishment, the enterprises are not experiencing the expected growth and development (UNCTAD, 2005, Ahiawodzi and Adade, 2012). It is possible that enterprise establishment factors are generally overlooked by both development agents and researchers who focus almost all their attention on post establishment factors while providing support for the establishment and growth of micro enterprises.

Enterprise growth is mostly viewed in the context of internal and limited external factors (Pitelis, 2009; Mao, 2005), with little consideration for the factors that contribute to the establishment of the enterprises. However, Delanoë (2013), Gilbert et al. (2006), Masakure et al. (2006), and Akoten et al. (2006), have determined that factors associated with enterprise establishment (basic task identified, availability of funds, business information and expertise) have a relationship with the establishment and employment growth of enterprises. Yet most entrepreneurs do not pay particular attention to these factors when establishing enterprises (Tushabomwe-Kazooba, 2006). This study is therefore designed to investigate the contribution of enterprise establishment factors to employment growth of the pineapple industry in the Nsawam-Adoagyiri District in the Eastern Region of Ghana.

The study seeks to answer the question; how do enterprise establishment factors contribute to employment growth of the pineapple industry? The specific objective of the study is to determine the contribution of enterprise establishment factors to employment growth of pineapple enterprises in the study area.

Methods

The study used mixed methods for the data collection. A survey of 172 entrepreneurs in both the production and processing of pineapple were selected by simple random sampling from eight (8) farmer based organizations in the Nsawam-Adoagyiri District. A questionnaire containing both closed and open ended questions was administered for the collection of quantitative and qualitative data. Variables investigated under enterprise establishment factors include enterprise characteristics, availability of funds for enterprise establishment, business information and entrepreneur’s expertise.

Employment growth was measured as change in the number of employees within the past three years (2012, 2013 and 2014). The data collected were analyzed using chi square test to determine the relationship between employment growth and enterprise establishment factors. Multiple regression analysis was used to determine the extent to which enterprise establishment factors explained the variations in employment growth in the pineapple industry in the study area. Narratives by respondents were used to support the discussion of the results from the data analysis.

Results and discussions

The contribution of enterprise characteristics to employment growth

The contribution of enterprise characteristics to employment growth was investigated under two sections: the type of pineapple enterprise (Table 1) and the customer needs that products meet (Table 2).
Table 1. The contribution of enterprise establishment factors to employment growth

<table>
<thead>
<tr>
<th>Variables</th>
<th>Employment growth</th>
<th>Chi Square results</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No change</td>
<td>Positive change</td>
</tr>
<tr>
<td></td>
<td></td>
<td>χ²</td>
</tr>
<tr>
<td>Type of Agro enterprise</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agro producing enterprise</td>
<td>154(96.3%)</td>
<td>6(3.7%)</td>
</tr>
<tr>
<td>Agro processing enterprise</td>
<td>5(41.7%)</td>
<td>7(58.3%)</td>
</tr>
<tr>
<td>Customers' needs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption need</td>
<td>42(82.4%)</td>
<td>9 (17.6%)</td>
</tr>
<tr>
<td>Raw material need</td>
<td>117(96.7%)</td>
<td>4(3.3%)</td>
</tr>
<tr>
<td>Funds availability for enterprise establishment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Available</td>
<td>4(66.7%)</td>
<td>2(33.3%)</td>
</tr>
<tr>
<td>Not available</td>
<td>155(93.4%)</td>
<td>11(6.6%)</td>
</tr>
<tr>
<td>Access to business information</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Access</td>
<td>157 (92.4%)</td>
<td>13(7.6%)</td>
</tr>
<tr>
<td>No access</td>
<td>2(100.0%)</td>
<td>0(0%)</td>
</tr>
<tr>
<td>Business information sources</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business advisory centres</td>
<td>1(33.3%)</td>
<td>2(66.7%)</td>
</tr>
<tr>
<td>Family/Friends</td>
<td>70(86.4%)</td>
<td>11(13.6%)</td>
</tr>
<tr>
<td>AEA/NGOs</td>
<td>86(100.0%)</td>
<td>0(0%)</td>
</tr>
<tr>
<td>No source</td>
<td>2(100.0%)</td>
<td>0(0%)</td>
</tr>
<tr>
<td>Entrepreneur's expertise from educational background</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expertise</td>
<td>99(90.0%)</td>
<td>11(10.0%)</td>
</tr>
<tr>
<td>No Expertise</td>
<td>60(96.8%)</td>
<td>2(3.2%)</td>
</tr>
<tr>
<td>Entrepreneur's expertise from previous work background</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expertise</td>
<td>70(86.4%)</td>
<td>11(13.6%)</td>
</tr>
<tr>
<td>No Expertise</td>
<td>89(97.8%)</td>
<td>2(2.2%)</td>
</tr>
</tbody>
</table>

Source: Field Survey, 2014

The relationship between the types of pineapple enterprise and employment growth was significant (χ²= 47.60; df= 1; p = 0.00). The pineapple processing enterprises are more likely to demonstrate positive employment growth than the producing ones. The finding agrees with Schaffnit-Chatterjee's (2014) findings that increased activity in the value chain, especially in the processing of raw produce, would lead to increase in employment.

The processing of more produce to market requires the employment of more workers to carry out the various activities. This was shown in a narrative typical of pineapple processing entrepreneurs as captured below:

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

The narrative shows that the pineapple processing entrepreneur will employ additional workers due to the enormous activities involved in the enterprise. Other
pineapple processing entrepreneurs made mention of the development of capacity in terms of finance and machinery to increase processing activities as shown in a typical narrative below:

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

The excerpt above shows that some of the pineapple processing entrepreneurs employ more workers due to the acquisition of machinery to expand processing capacities. Meanwhile the pineapple producing enterprises recorded no employment growth because many of the entrepreneurs and not have the capacity in terms of finance and machinery to expand production to employ more workers. The following excerpts are examples of how some entrepreneurs of agro producing enterprise expressed their concerns:

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

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

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

On how satisfying customers’ needs contributes to employment growth of pineapple enterprises, the chi square test result from the table 1 shows that the relationship was significant, \( \chi^2 = 10.56; \, df = 1; \, p = 0.01 \). The result indicates that pineapple enterprises that supply products for consumption needs are likely to experience more positive employment growth than pineapple enterprises that supply products for raw material needs (Table 1). Thus the satisfaction of the consumption need of customers will promote employment growth of the pineapple enterprise, wheras the satisfaction of the raw material need of processors, which is largely undertaken by the pineapple producing enterprises, will not.

The contribution of availability of funds to enterprise growth

Availability of funds for enterprise establishment was investigated on the basis of entrepreneur’s knowledge that such funds were available from government institutions and other organizations for the establishment of the enterprise. The relationship between availability of funds and employment growth was significant, \( \chi^2 = 5.91; \, df = 1; \, p = 0.02 \) (Table 1). Entrepreneurs who know about available funds were more likely to obtain a higher proportion of positive growth than those who do not. Entrepreneurs with such knowledge are likely to access the funds to employ workers for their pineapple enterprises. This result was in contrast with the findings of Nganda et al. (2014), who indicate that financial knowledge of the owner has a marginal weak association with growth of SMEs. The variation in results obtained is explained by constraints imposed by the business environment, the firm, and market characteristics in measuring business environment variables on the size of African firms (Olukunle, 2013).

Access to business information and employment growth

Access to business information was categorized into “access” and “no access”. Entrepreneurs who obtained business information were classified as “access” and those who did not obtain business information were classified as “no access”. The relationship between access to business information and employment growth was not significant, \( \chi^2 = 0.17; \, df = 1; \, p = 0.69 \). This means that there is no significant difference between the growth of employment by entrepreneurs that had access to business information and those who did not. This contrasts with results from Kenya by Bunyasi et al (2014) which found that access to business information had a significant effect on the growth of SMEs. It was determined that the information received by the entrepreneurs was more of a technical
than a managerial nature, which did not contribute much to the management of employees in the enterprises.

Business information sources were classified as information received from business advisory centres, Agricultural extension agents/Nongovernmental organizations, and Family/friends. Analysis of the results shows that the relationship between business information sources and employment growth of pineapple enterprises was not significant, \(\chi^2 = 0.17; df=3; p = 0.69\) (Table 1). There was no significant difference between employment growth of entrepreneurs who accessed business information through business advisory centres, family/friends, AEAs/NGOs and those who did not. There is the possibility that the business information received by the entrepreneurs was used in areas of the business other than the employment of workers.

**Entrepreneurs’ expertise and employment growth**

The examination of the contribution of entrepreneurs’ expertise acquired from educational background to employment growth of agro enterprises shows that the relationship was not significant, \(\chi^2 = 2.60; df=1; p = 0.11\) (Table 1). This means that expertise of entrepreneurs acquired from educational background does not contribute to the growth of enterprise in terms of employment. Most of the skills acquired from entrepreneurs’ educational background are technical in nature and not managerial, especially in the area of employment.

The contribution of expertise acquired by entrepreneurs from their previous work background to the growth in employment of the enterprise was also examined. The result shows that the relationship was significant, \(\chi^2 = 7.95; df=1; p = 0.01\). This means that there are differences in employment growth of entrepreneurs who had previous work experience before establishing such enterprises and those who did not. It was observed that entrepreneurs who acquired expertise from their previous work background had a higher proportion of positive employment growth than entrepreneurs without such expertise. Entrepreneurs acquire management, communication and negotiation skills from their previous work that are used to employ and maintain their staff. The result confirms the findings of Nitcher et al. (2010) that successful entrepreneurs benefited from marketing, administration and negotiation skills developed in previous jobs. These skills acquired by the entrepreneur are a source of competitive advantage within the enterprise (Hernández-Maestro et al., 2009).

The following excerpts are typical of some statements obtained from the interactions with entrepreneurs during the field survey:

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

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

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

"I was a supervisor so I learnt how to deal with employees" (Pineapple producer from Pokrom)

From the above statements it can be observed that some of the entrepreneurs were managers who were employing people and supervising others in their previous work place. Their work, according to them, has given them the experience and skills to manage, communicate, and negotiate with people for employment into their agro enterprises.

**Enterprise establishment factors and employment growth**

A multiple regression analysis was used to determine the percentage of the variation in employment growth explained by the combined effects of the enterprise establishment factors (Table 2). For this analysis, employment growth (dependent variable) was measured as the number of workers employed within a period of 3 years. The predictor variables were the factors considered...
by the entrepreneurs during the process of enterprise establishment. They were: type of agro-enterprises, customer needs, funds availability, access to business information, expertise from educational background, and expertise from previous work experience. From the analysis the predictor variables explain 52% of the variations in employment growth of the pineapple industries in the study area (Table 2).

Table 2. Regression analysis of enterprise establishment factors and employment growth

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Std</th>
<th>Multiple regression weight</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>b</td>
</tr>
<tr>
<td>Type of agro-enterprise</td>
<td>1</td>
<td>0.00</td>
<td>0.99**</td>
</tr>
<tr>
<td>Customer needs</td>
<td>1</td>
<td>0.00</td>
<td>0.96**</td>
</tr>
<tr>
<td>Funds availability</td>
<td>0.04</td>
<td>0.18</td>
<td>1.67**</td>
</tr>
<tr>
<td>Access to business information</td>
<td>0.99</td>
<td>0.11</td>
<td>0.25</td>
</tr>
<tr>
<td>Expertise from educational background</td>
<td>0.64</td>
<td>0.48</td>
<td>0.28</td>
</tr>
<tr>
<td>Expertise from previous work experience</td>
<td>1.54</td>
<td>0.50</td>
<td>0.01*</td>
</tr>
</tbody>
</table>

*p<0.05.  **p<0.01  R=0.66  R²= 0.52  Adjusted R²= 0.41

Conclusion

This study has addressed only the question of how enterprise establishment factors contribute to employment growth of the pineapple industry. The study found that the characteristics of the enterprise, that is, the basic needs identified by the entrepreneur, contribute to employment growth of the enterprise. The findings support the fact that increased activity in the value chain, especially in the processing of raw produce, would lead to increase in employment.

Availability of funding for enterprise establishment was found to have a relationship with growth in employment. This suggests that if entrepreneurs are educated on where to get funds for agro enterprise establishment, they could access such money to acquire expertise that could lead to the employment of more workers. Therefore, funding is vital for employment growth. Enterprise establishment factors explain 52% of the variations in employment growth in the pineapple industries in the study area.

There was no significant relationship between entrepreneurs’ expertise from educational background and employment growth of the pineapple industry. This was attributed to the fact that entrepreneurs had forms of training other than formal education that enhanced their skills in establishment and management of agro enterprises. Entrepreneur's expertise from previous work background was found to contribute to employment growth. This was due to the human resource management that entrepreneurs acknowledged receiving from their previous work environment. It can be concluded that the enterprise establishment factors do not only influence the entrepreneurial or enterprise establishment process but also contribute to employment growth of the pineapple industry.

Recommendations

On the basis of the outcomes of the study, it is recommended that would-be entrepreneurs should be given knowledge about the availability of funds for enterprise establishment since such knowledge could lead to the employment of workers when funds are accessed. With the revelation that enterprise establishment factors investigated in this research explain 52% of the variations in employment growth in the pineapple industry, it is recommended that educational institutions include in their curriculum content that helps prospective entrepreneurs to acquire expertise related to enterprise establishment factors such as expertise in sourcing funds, identification of basic needs that can be met by new enterprises, identification of customer needs, and an understanding of the types of enterprises they wish to engage in.
References


