

**PERFORMANCE OF MICRO AND SMALL SCALE BUSINESS IN NORTHERN
REGION OF GHANA: NON-FINANCIAL ANALYSIS**

ABSTRACT

The need for the reduction in poverty status of rural people through the development of Agribusiness is of paramount concern to most governments. Agribusiness in Africa is considered the catalyst for economic growth and poverty reduction. The importance of Agribusiness to the development of Ghana is quite clear however very little is done to develop it. The broad question is, are these businesses not doing well? The paper is aimed at assessing the performance of Micro and Small Business using the non-financial method. 160 Micro and Small Business were surveyed across the northern region of Ghana using multi-stage sampling approach in 2012. The result showed that the four most important objectives of the entrepreneurs were achieved. This included; to increase level of household income, to increase security of household income, to enhance business profitability, and Satisfaction from running own Business. The most important challenges identified are, lack of working capital, Poor access to credit, and High cost of credit. There is agreement among the objectives and challenges identified by entrepreneurs of micro and small Agribusiness. Entrepreneurs were generally satisfied with the performance of their Businesses.

Key words: Micro and Small Agribusiness, Non-Financial and Performance

Introduction

In many instances, Agribusiness firms provide marketing, finance, input supply and advisory services to producers or serve as intermediaries for improving producer access to services. In brief, Agribusiness development is inevitable. The real issues are not whether, rather they are how to accelerate, how to ensure that maximum benefits are realized, and how to address equity and ensure fairness in the changes that will be taking place (FAO, 2004).

Currently there is a growing concern that priority should be given to Agribusiness (the food processing industry) in Ghana. The fact is that export earnings from this industry are substantial. Since women are generally more involved in processing of agricultural products than men in many countries in Africa it is the belief that if women in Africa are given the opportunity, they will contribute substantially in the development of Agribusiness (the food processing industry) and solve the persistent problem of malnutrition and poverty in the rural and semi-urban communities (Okorley and Kwartan, 2006).

The small business sector is recognized as an integral component of economic development and a crucial element in the effort to lift countries out of poverty (Wolfenson, 2001). The dynamic role of small and medium enterprises (SMEs) in developing countries as engines through which the growth objectives of developing

countries can be achieved has long been recognized. It is estimated that SMEs employ 22% of the adult population in developing countries (Daniels & Ngwira, 1992; Daniels & Fisseha, 1992; Fisseha, 1992; Fisseha & McPherson, 1991; Gallagher & Robson, 1993). Agribusiness in Africa is considered the catalyst for economic growth and poverty reduction. It is a business solution to rural poverty if redistribution mechanisms work. The Agribusiness initiative is both a strategy to accelerate development and a business solution to rural poverty. The vision of the Food and Agriculture Organization is to make Agribusiness a more profitable business entity (FAO, 2004). The importance of Agribusiness development to the development of Ghana's economy cannot be overemphasized as government makes it a major priority in the Millennium Challenge Compact (MCC), which was signed with the United States of America in 2006.

With specific reference to Ghana the questions that come to mind are: what is the nature and forms of Micro and Small-Scale Business (MSAs) in Ghana? How are micro and small Business performing with respect to their objectives and challenges? Are there any linkages between micro and small-scale Business? And what is the source of funding to these businesses? What is their business registration, saving, record keeping and business account holding status? It is therefore not far-fetching that seeking answers to these questions becomes very important in this study.

Seven objectives were set and these included, To assess the nature and forms of micro and small Business in Ghana and the relative involvement of women and men, To identify the objectives and challenges of micro and small Business and to rank them in order of importance, To identify the forms and types of linkages that exists between micro and small Business, Assess the sources of capital to micro and small Business, and assess their business registration, saving, record keeping and business account holding status.

How Should SME's Performance be Measured? The lack of separation of ownership and management of a business enterprise is believed to allow the goals of the owner to become the goals of the firm (Naffziger, Hornsby et al. 1994). Given the significant freedom 'being your own boss' has in the pursuit of business objectives (LeCornu, McMahon et al. 1996). Further, it has been reported that many of the stated reasons for entering a small business are non-financial in nature (Stanworth and Curran 1976). For this reason, Brush (1992:22) argued that, the 'assessment of business performance for women owned businesses should include not only financial measures, but should incorporate other measures such as employee satisfaction, social contributions, goal achievement, and effectiveness'.

Buttner and Moore (1997:34) supported this view noting that the entrepreneurs in their study measured success in terms of 'self-fulfillment and goal achievement. Profits and business growth, while important, were less substantial measures of their success.' Similarly, Kuratko, Hornsby and Naffziger (1997:31) argued that the intrinsic goal set suggested by their study emphasized that 'entrepreneurial success should not be solely measured in financial terms'. However, despite this ready acceptance of the importance

on non-financial objectives, research seems to have concentrated on traditional economic measures of performance.

As noted by Murphy, Trailer and Hill (1996) one approach to measuring effectiveness is to relate performance to organizational goals. It would appear that this approach might be particularly appropriate for SMEs, where the goals of the organization and of the owner are generally one and the same. Hence the reason for the adoption of this approach for this study.

Materials and Methods

Methodology

The population of interest for the study were micro and small-scale Business operating within northern region of Ghana. 160 Micro and Small-Scale Business (MSAs) were surveyed across the northern region of Ghana using multi-stage sampling approach in 2012. Probability sampling (**stratified sampling**) was used. The region was classified in to two categories (urban and rural areas). This procedure allowed us to take a representative sample with characteristics that can be generalized for the entire population which it represents. 80 MSA were sampled from each category giving us a total of 160 MSAs.

Analysis of Agribusiness Performance

Employee satisfaction, challenges, social contributions, goal achievement, and effectiveness' have been used to assess the performance of Small and Medium Scale Enterprises (SMEs) Brush (1992:22), Buttner and Moore (1997:34), (Rosa, Carter et al. 1996; Fasci and Valdez 1998). Success has been measured based on goal/objective achievement Buttner and Moore (1997:34).

As noted by Murphy, Trailer and Hill (1996), performance will be measured by relating performance to organizational objectives. This approach is particularly appropriate for SMEs, where the goals of the organization and of the owner are generally one and the same. The objectives and challenges at the start of business and during operation of business will be identified. Objectives that MSAs are satisfied with will be identified and compared with objectives of the enterprises identified at the start of the Business. The objectives and challenges will also be ranked using the Kendall's coefficient of concordance.

The level of success will be assessed based on the level of satisfaction. The higher the percentage scores the higher the level of success. If the percentage of all objectives scores 50 and above then we will say the businesses is successful with regard to the objective below 50% then it is not successful.

The Kendall's Coefficient of Concordance

The Kendall's concordance analysis was used to identify and rank the objectives and constraints of Business It helped to establish the extent of disagreements and agreements among entrepreneurs.

The Kendall's coefficient of concordance (W) was used to measure the degree of agreement among m set of n ranks. W is an index that measures the ratio of the observed variance of the sum of ranks to the maximum possible variance of sum of ranks. The idea behind this index is to find the sum of ranks for each thing being ranked and then to examine the variability of this sum. If the rankings are in perfect agreement, the variability among sums will be a maximum (Mattson, 1986).

This is a statistical procedure, which is used to identify and rank a given set of objectives into the most pressing one up to the least pressing one and then measures the degree of agreement/concordance between these constraints and objectives. The identified constraints and objective were ranked according to the most pressing to the least pressing using numerals; 1,2,3,4...n, in that order. Computing the total rank score for each constraint and objective, the constraint and objective with the least sum of score is ranked as the most important whilst the one with the highest sum of score is ranked as the least important. The total rank score computed is then used to calculate for the coefficient of concordance (W), to measure the degree of agreement in the rankings (Allen Edwards, 1964).

The limits for W cannot exceed 1 and cannot be negative. That is, it can only be positive in sign and ranges from 0 to 1. It will be 1 when the ranks assigned by each judge (entrepreneur) are exactly the same as those assigned by other judges (entrepreneurs). If we let T represent the sum of ranks for each thing being ranked, the variance of the sum of ranks is estimated by the formula:

$$\text{var}_T = \frac{\sum T^2 - (\sum T)^2 / n}{n} \dots\dots\dots (1)$$

the maximum variance of T is then given by:

$$\text{VarT (max)} = \frac{m^2 (n^2 - 1)}{12} \dots\dots\dots (2)$$

the formula for the coefficient of concordance W is then given by:

$$W = \frac{(\sum T^2 - (\sum T)^2 / n) / n}{m^2 (n^2 - 1) / 12} \dots\dots\dots (3)$$

W is simplified as:

$$W = \frac{12 \left| \sum T^2 - (\sum T)^2 / n \right|}{nm^2 (n^2 - 1)} \dots\dots\dots (4)$$

where; **T** =sum of ranks for each objective being ranked.

m = number of rankings (entrepreneur) and

n = number of things (factors) being ranked.

Hypothesis and Significance test for W: (F-Test)

H₀₁: There is no significant difference in the objectives identified by entrepreneurs of micro and small Agribusiness

H₁₁: There is significant difference in the objectives identified by entrepreneurs of micro and small Agribusiness

H₀₂: There is no significant difference in the challenges identified by entrepreneurs of micro and small Agribusiness

H₁₂: There is significant difference in the challenges identified by entrepreneurs of micro and small Agribusiness

The Coefficient of concordance **W** is tested for significance using the **F** distribution.

The F ratio is given by: **[(m-1)W]/(1-W)**, = with **(n-1)-2/m**, degrees of freedom for the numerator and **m-1[(n-1)-2/m]**, degrees of freedom for the denominator (Allen Edwards, 1964).

RESULTS

This presents the results and discussion on the non-financial measure of Agribusiness performance.

The Nature and Forms of Micro and Small Scale Business

Analysis of the data regarding the nature and forms of micro and small scale Business in Northern Ghana and relative involvement of male and female yielded the following information presented in Table 4.1 below.

Table 4.1: Gender and Type of Ownership in MSAs

Sex	Frequency	Percentages
Male	72	45.00%
Female	88	55.00%
Type of ownership		
Sole proprietor	154	96%
Partnership	6	4%
Total	160	100%

Males form about 45% and females 55% of small and micro Business. Males are somewhat less involved than their female's counterparts in Business. There are two main forms of ownership of Business identified in this study; these include sole proprietorship, which forms about 96%, and partnership, which is 4%. It is quite clear from the results above that sole proprietorship is the main type of ownership of micro and small Business in Northern Region.

The study identified the Agribusiness activities listed in Table 4.2 below,

Table 4.2: Agribusiness Activities Identified

Agribusiness activity	Frequency	Percentage
Crop Farming	16	10.0
Agriculture services	3	2.1
Fish farming	1	0.5
Livestock farming	9	5.7
Hunting/Trapping/Game	1	0.5
Food manufacturing/Processing	39	24.1
Beverage manufacturing/Processing	3	1.6
Tobacco manufacturing/Processing	1	0.5
Retail of farm produce	88	55.0
Total	160	100

Food retailing was the major MSA activity surveyed representing about 55% of the MSAs surveyed. Food manufacturing/processing and crop farming forms about 24% and 10% respectively, the rest are below 10%.

Objectives and Challenges of Micro and Small Business

The objectives of proprietors identified before the start of business is shown in table 4.3.

Table 4.3: Ranking of Objectives of Proprietors Identified Before Starting the Business

Objectives	Sum of Ranks	Ranking
Increasing security of household income	257	1
Increasing level of household income	298	2
Continue a family tradition/business	649	3
Satisfaction from running own business	709	4
To operate own business	872	5
To fully employ one self	883	6
Improving status in community	908	7
Limited income from other sources	1124	8
Achieving a flow of money quickly	1131	9
Investing in another business	1210	10
Limited other ways to earn income	1322	11

The objectives identified are ranked in order of importance from the most important (Increasing security of household income is ranked 1) to the least important (Limited other ways to earn income ranked 11). This is ranked using Kendall's coefficient of concordance sum of ranks for each objective. This is explained in materials and methods.

The satisfaction of the entrepreneurs with regard to their objectives set was determined by the survey. This is shown in Table 4.4 below. A score of 50% and above is considered the pass mark for all the columns. Those ones are bolded in Table 4.4.

Table 4.4: The Measure of Satisfaction of Entrepreneurs' Initial Business Objectives

Objectives	Satisfied (%)	Dissatisfied (%)	Neither Satisfied Nor Dissatisfied (%)
To increase level of household income:	62.9	18.5	16.9
To increase security of household income:	62.4	18.5	17.4
To expand business:	36	19.1	42.1
To enter new markets:	19.1	15.2	54.5
To start another business:	10.7	11.8	64
To enhance quality of products:	20.3	8.4	53.9
To improve status in community:	33.2	2.2	56.2
To increase share of existing markets:	35.9	10.1	46.6
To enhance business profitability:	50	21.9	23
To develop new products:	9	14.6	50.6

To invest in new equipment/tools:	5.1	19.1	45.5
To invest in new business facility:	10.7	18	52.2
To build the business:	38.7	14.1	40.5
To be an entrepreneur:	42.1	7.3	39.4
Free up time for leisure:	21.9	9	43.8
To understand consumer demand better:	25.3	5.6	55.6
To add value to things already produce:	19.6	12.4	55.1
To invest in another business:	15.2	12.9	60.1
Better fit with other business activities:	24.7	10.1	50
Satisfaction from running own business:	73.6	7.9	14.6

The study shows that some of the objectives set by proprietors of Agribusiness were achieved as shown in Table 4.4 above. From a list of twenty objectives the study asked proprietors to identify the objectives they were satisfied with. This was categorized into four main categories. These include satisfied (Very Satisfied and Satisfied), Dissatisfied (Very Dissatisfied and Dissatisfied), and Neither Satisfied nor Dissatisfied. Each category is scored in percentages. Out of the twenty objectives that were listed, the study revealed that, only four objectives had a percentage score of 50% and above which the respondents are satisfied with. These are to;

1. Increase level of household income 62.9%
2. Increase security of household income 62.4%
3. Enhance business profitability 50.0%
4. Satisfaction from running own business 73.6%

Comparing these objectives to those identified and ranked during the start of their business and objectives identified during operation of business, it is clear that three out of the four topmost objectives were the same ones that entrepreneurs were satisfied with. Out of the twenty objectives, entrepreneurs were not certain with ten objectives as to whether they were satisfied with them or not. For the Dissatisfied column, none of the objective scored up to the 50% mark. It is evident from the study that the entrepreneurs were generally satisfied with their performance since they were not dissatisfied with any of them. That is no objective scored a pass mark under the dissatisfied column.

Challenges affecting performance of entrepreneurs were identified and listed in table 4.5. They were ranked in order of importance. The results also showed that, access to working capital, credit and cost of credit are the three topmost challenges to micro and small Business with access to training courses being the least in terms of their ranking. Using the Kendall's coefficient of concordance, the sum of their ranks is used to rank them as explained in the methodology. Rank 1 means the most important challenge to the least being ranked 10. Hence access to working capital, access to credit, and cost of credit are the most important challenges with access to training courses being the least important.

Table 4.5: Challenges that Affect Entrepreneurs Performance and their Ranking

Validation of Hypothesis

The Kendall's coefficient of Concordance (W) was used to test the stated hypotheses:

Challenges	Sum of Ranks	Ranking
Access to working capital	282	1
Access to credit	395	2
Cost of credit	519	3
Financial obligation to family	544	4
Financial obligation to community	736	5
Consequences should the business fail	828	6
Keeping reliable records	927	7
Financial resources within business	1126	8
Access to business sport services	1173	9
Access to training courses	1277	10

1. There is no significant difference in the objectives identified by entrepreneurs of micro and small Agribusiness

2. There is no significant difference in the challenges identified by entrepreneur in micro and small Agribusiness

For the first hypothesis, the F-statistic calculated is 174.88 compared to F-statistic ($F_{(10,132)}$) from the table which is 2.32 at 1% level of significance. Hence the null hypothesis is accepted. This implies there is agreement among the objectives identified by entrepreneurs in micro and small Agribusiness

For the second hypothesis, the F-statistic calculated is 252.24 compared to F-statistic ($F_{(9,133)}$) from the table which is 2.41 at 1% level of significance. Hence the null hypothesis is accepted. This implies there is agreement among the challenges identified by each entrepreneur in micro and small Agribusiness

The types and forms of linkages that are identified between micro and small Business are listed in table 4.6 below. Out of the businesses sampled only 66 of them, forming about 37% were involved in some form of linkages. Majority of them were not involved in any form of linkages. Sharing of transportation has the highest score of 24% followed by joint marketing of inputs and obtaining credit with scores of 18%. Joint production of inputs and Savings has the lowest scores of about 1.5%. The linkages identified ranked "informal agreements" highest with about 87%, Cooperatives 2%, and Associations 11%. This means that most Agribusiness linkage agreements take informal forms.

Table 4.6: Types and forms of linkages

Linkage type	Frequency	Percentage
Joint procurement of inputs	5	7.58
Joint production of inputs	1	1.52
Joint marketing of products	12	18.18
Savings	1	1.52
Sharing of equipments	4	6.06
Sharing of transportation	16	24.24
Obtaining credit	12	18.18
Contract supply	9	13.64
Sharing of storage facility	6	9.09
Total	66	100
Form		
Informal agreements	41	87.23
Cooperatives	1	2.13
Associations	5	10.64
Total	47	100

Sources of Capital to Micro and Small Business

The study identified sources of startup and working capital for micro and small Business as shown in Table 4.7 below. This is to identify the main source of startup and working capital to micro and small Business

Table 4.7 Startup and Working Capital

Source Startup	Frequency	Percent
Loan/credit	13	8.13
Household savings	128	80.00
Proceeds from family farm	6	3.75
Proceeds from non-farm business	4	2.50
Gift from friends/family	9	5.63
Total	160	100
Source Working		
Proceeds from business	136	85.00
Friends/Relatives	2	1.25
Loan from rural or community bank	12	7.50
Loan from money-lender	1	0.63
Suppliers	8	5.00
NGO support	1	0.63
Total	160	100

Household savings is a major source of start up capital for most micro and small Business forming about 80%. Those who had access to credit accounted for about 8% of MSAs surveyed. Hence credit is a big constraint to micro and small Business as reported by Parker *et al*, (1995) and Aryeetey *et al* (1994).

Majority of Business obtain their working capital from proceeds of the business they are currently operating. It forms about 85% of the sources identified. The others form less than 10% of those sampled as is shown in Table 4.7. Hence proceeds from the business are the major source of working capital to micro and small-scale Business

Business Features

The status of micro and small Business with regard to registration, savings, record keeping and Business account holding was established. Every business is expected to be registered, have an account, keep records and save. This is to help in the smooth running of the Business Table 4.8 below shows the status of businesses with regards to registration, account holding, record keeping and saving status.

Table 4.8 Business Status

Registered Status	Frequency	Percent
Not registered	94	59
Registered with Registrar General	0	0
Registered with district assembly	63	39.3
Not Applicable	3	1.7
Total	160	100
Account status		
No bank account	98	61.02
Business bank account	14	8.47
Use personal bank account for business	49	30.51
Total	160	100
Business Savings Status		
No	85	53.4
Yes	75	46.6
Total	160	100
Record Keeping status		
Yes	40	24.7
No	120	75.3
Total	160	100

Most micro and small Business that is about (59%) of the sampled MSAs's are not registered with just a few (39%) registered with the District Assembly. None was registered with the Registrar General as shown in Table 4.8. The implication is that since these, Micro and Small Scale Business are not formally registered they are unable to access credit as indicated in Parker *et al*, 1995 and Aryeetey *et al*, 1994.

It is expected that every good Business should have a Business account. This is to help in the prudent management of Business funds. Most of the Businesses operate without a Business account (about 61%). Personal bank accounts are mostly used for Business and this forms about 30% of SME's sampled as shown in Table 4.8 above. Their inability to access bank loans could be attributed to the fact that most of them have no Business bank accounts. It is expected that every good Business should have a Business account where it saves. This is to help the Business raise funds for expansion and other activities as explained above.

Out of the Businesses surveyed, the result indicates that, about 47% of them save, implying that a majority (about 53%) of them do not save. This can be attributed to the MSA's not having bank accounts. Hence their inability to access credit for expansion.

Record keeping is an important activity in operating a Business The study sought to assess the extent to which micro and small Business are involved in keeping records. Out of the Businesses surveyed about 25 percent of them keep records of their activities and about 75 percent of them do not keep records. Lack of data regarding the operation of the Business does not encourage financial institutions to advance credit to them. The records help in monitoring and tracking the activities of the Business These can even help in planning of the Business

Conclusions and Recommendation

The following conclusions and policy recommendations are made based on the results of the study.

Women are more involved in Micro and Small Business than men. There are two main forms of ownership of Business identified in this study; these include sole proprietorship, which forms about 96%, and partnership, which is 4%. It is quite clear from the results above that sole proprietorship is the main type of ownership of micro and small Business in Northern Region. However it is recommended that government should formulate and recommend policies that will encourage partnership because of its enormous advantages.

The result shows that the four most important objectives of the entrepreneurs are achieved. These included; To increase level of household income 62.9%, To increase security of household income 62.4%, To enhance Business profitability 50.0%, and Satisfaction from running own Business 73.6%. The most important challenges identified are, lack of working capital, Poor access to credit, and High cost of credit. The result showed that there are a number of linkages that exist in micro and small Agribusiness.

These linkages mostly take the form of cooperatives, association and informal agreements.

The main source of startup capital to these Businesses is household savings, as access to finance remained a dominant constraint to small-scale enterprises in Northern Ghana. (Aryeetey et al, 1994). Proceeds from Business are the main source of working capital for the Businesses.

The most important challenges to the performance of MSAs are identified and ranked in order of importance with access to working capital being the most important (1) and access to training courses being the least important and ranked (10). The forms of linkages that were identified included sharing of transportation which has the highest score of 24% followed by joint marketing of inputs and obtaining credit with score of 18%. Joint procurement of inputs and Savings have the lowest score of 1.5%. Most of these linkages were in the form of informal agreements.

Household savings is a major source of start up capital for most micro and small Business constituting about 76% and Loans are about 8%. Majority of Business obtain their running capital from proceeds from their Businesses. It forms about 85% of the sources identified.

Most MSAs are not registered; only about 39% are registered with the District Assembly. Most of the Businesses operate without a Business account. Personal bank accounts are mostly used for Businesses. This forms about 30% of people surveyed. Out of the Businesses surveyed, about 47% of them save; implying that a majority of them do not save. Only about 24.7% of Businesses surveyed kept records. It is evident in this study that entrepreneurs do not go into Business solely because of financial reward.

Efforts should be made by government and all stakeholders in Agribusiness to train MSAs on the need to keep records, save money, operate a Business account and also register their Businesses. Further work is, however, required to carry out a more detailed analysis to compare the performance of men and women entrepreneurs in MSAs using the non-financial approach. The study should also be redesigned to cover only one or two areas of Business

References

Aryeetey E, Baah-Nuakoh A, Duggleby T, Hettige H & Steel W.F (1994), 'Supply and Demand for Finance of Small Scale Enterprises in Ghana', World Bank Discussion Paper No. 251

- Birley, S., & Westhead, P. (1990), 'Growth and Performance Contrast between 'types' of Small Firms'. *Strategic Management Journal*, 11:535-557.
- Brush, G. (1992). Research on women business owners: past trends, a new perspective, future directions. *Entrepreneurship Theory and Practice*, 16(4):5-30.
- Buttner, E. H. and D. P. Moore (1997), 'Women's Organizational Exodus to Entrepreneurship: Self-Reported Motivations and Correlates with Success', *Journal of Small Business Management* Vol 35 No 1 pp 34-46
- Daniels, L and Ngwira A.(1992), 'Results of a Nation-wide Survey on Micro, Small and Medium Enterprises in Malawi', GEMINI Technical Report No 53. PACT Publications, New York.
- Daniels& Fisseha (1992), 'Micro and Small Scale Enterprises in Botswana: Results of a Nation-wide Survey', Gemini Technical Report No. 46, Washington D.C, Development Alternatives Inc.
- Du Rietz, A. and M. Henrekson (2000), 'Testing the Female Underperformance Hypothesis'. *Small Business Economics*, 14(1):1-10.
- Etzioni, A. (1964), 'Modern Organisations'. Englewood Cliffs, New Jersey: Prentice-Hall Inc. Federal Research Division. (n.d.) Country Studies-Ghana
- FAO, (2004), *Strengthening Agri-Business Farm Linkages in Africa*: Rome.
- Fasci, M. A. and J. Valdez (1998), 'A Performance Contrast of Male- and Female-Owned Small Accounting Practices'. *Journal of Small Business Management* 36(3):1-7.
- Fisseha Y (1992), 'Small Scale Enterprises in Lesotho: Summary of a Country-wide Survey', Gemini Technical Report_No. 14, Washington D.C, Development Alternatives Inc.
- Fisseha and McPherson (1991), 'A Country-wide Study of Small Scale Enterprises in Swaziland', Gemini Technical Report No. 24, Washington D.C: Development Alternatives Inc.
- Gallagher C & Robson G (1993), 'The Job Creation Effects of Small and Large Firm Interaction', *International Small Business Journal*, 12(1):23-37.
- Glancey, K. (1998), 'Determinants of Growth and Profitability in Small Entrepreneurial Firms'. *International Journal of Behaviour and Research*, 4(1):18-27
- Jarvis, R., Kitching, J., Curran, J., & Lightfoot, G. (1996), 'Performance Measures and Small Firms'. *Certified Accountant*, 88(11):48-49

- Jarvis, R., Curran, J., Kitching, J., & Lightfoot, G. (2000), 'The Use of Quantitative and Qualitative Criteria in the Measurement of Performance in Small Firms'. *Journal of Small Business and Enterprise Development*, 7(2):123-134.
- Jianakoplos, N. A. and A. Bernasek (1998), 'Are Women More Risk Averse?'. *Economic Inquiry*, 36(4):620-630.
- Kotey, B., & Meredith, G. G. (1997), 'Relationship Among Owner/Manager Personal Values, Business Strategies and Enterprise Performance'. *Journal of Small Business Management*, 32(2):37-64
- Kuratko, D. F., J. S. Hornsby and D. W. Naffziger (1997), 'An Examination of Owner's Goals in Sustaining Entrepreneurship'. *Journal of Small Business Management* 35(1):24-33
- LeCornu, M. R., McMahon, G. P., Forsaith, D. M., & Stanger, A. M. J. (1996), 'The Small Enterprise Financial Objective Function'. *Journal of Small Business Management*, 34(3):1-14.
- Mattson, D.E (1986), 'Statistics-Difficult Concept of Understanding Explanations'. Bolchanzy Carducci Publishers Inc.pp.281,283.361,423.
- Murphy, G. B., Trailer, J. W., & Hill, R. C. (1996), 'Measuring Performance in Entrepreneurship Research'. *Journal of Business Research*, 36(1):15-23
- Naffziger, D. W., J. S. Hornsby and D. F. Kuratko (1994), 'A Proposed Research Model of Entrepreneurial Motivation'. *Entrepreneurship Theory & Practice*, 18:29-42
- Okorley E.L. and Kwartan J.A., (2006), Women and agro-processing in Africa : a case study of the state of women in fish smoking in the central region of Ghana,
- Parasuraman, S., Y. S. Purohit and V. M. Godshalk (1996), 'Work and Family Variables, Entrepreneurial Career Success and Psychological Well-Being'. *Journal of Vocational Behavior*, 48(3):275-300.
- Parker R.L, Riopelle R, Steel W.F (1995), 'Small Enterprises Adjusting to Liberalisation in Five African Countries'. World Bank Discussion Paper No. 271, African Technical Department Series.
- Powell, M. and D. Ansic (1997), 'Gender Differences in Risk Behaviour in Financial Decision-Making: An Experimental Analysis'. *Journal of Economic Psychology*, 18(6):605-628.
- Rosa, P., S. Carter and D. Hamilton (1996), 'Gender as a Determinant of Small Business Performance: Insights from a British Study'. *Small Business Economics*, 8:463-478.

Ryan, B. (1995), *Strategic Accounting for Management*. London: Dryden Press

Sexton, D. L. and N. Bowman-Upton (1990), 'Female and Male Entrepreneurs: Psychological Characteristics and Their Role in Gender-Related Discrimination', *Journal of Business Venturing*, 5(1):29-36.

Sharpe, W. F. (1975), 'Adjusting for Risk in Portfolio Performance Measurement', *The Journal of Portfolio Management*, 1(2):29-34.

Stanworth, M. K. J. and J. Curran (1976), 'Growth and the Small Firm - An Alternative View'. *Journal of Management Studies*, 13(2):95-110

Tsai, W., MacMillan, I., & Low, M. (1991), 'Effects of Strategy and Environment on Corporate Venture Success in Industrial Markets'. *Journal of Business Venturing*, 6:9-28

Verheul, I., Risseuw, P., & Bartelse, G. (2002), 'Gender Differences In Strategy And Human Resource Management'. *International Small Business Journal*, 20(4):443-476.

Watson, J., Newby, R., & Woodliff, D. (2000), 'Work and Owner Satisfaction for Performance Measurement'. Retrieved May 12th, 2006, from www.usasbe.org/knowledge/proceedings/2000/watson.pdf

Wolfenson, J. D. (2001). The challenges of globalisation: the **role** of the World Bank. Paper presented at the Address to the Bundestag, Berlin, Germany.