

Employee factors, rather not customer factors drive corporate strategies for agribusiness investment in Uganda

Conference Paper

August 2014

Samuel Kalimunjaye^{1,2}, Maurice Olobo¹, Stephen Kyakulumbye¹, Vicent Kisenyi¹, Godwin Awio¹

¹Faculty of Business and Management, Uganda Christian University Mukono, Kampala Uganda

²National Agricultural Research Organization/National Forestry Resources Research Institute Uganda

Email: kali.samuel@gmail.com

P.O.Box 1752 Kampala/ P.O. Box 4 Mukono,Kampala

Date: August27, 2015

Abstract

This paper presents evidence that corporate strategies provide the basis for agribusiness development and managing risk and uncertainty. These strategies are driven by, among others, employee factors, which are, however, usually given less attention. This study assessed corporate carbon financing strategies and competitiveness of small and medium enterprises with different management practices in Uganda. We used multiple regression analysis to assess the number one predictor for corporate carbon financing strategies. The study indicated Pearson correlation ($r = 0.602^{**}$) significance at $p < 0.001$, the result of $r = 0.602^{**}$ were found higher than person-product correlation coefficient critical values of 0.36. This implies that as employee factors are improved there is a likelihood that corporate strategies become more innovative and they will target more opportunities and they were found to be the number one predictor of competitiveness ($p < 0.05$).

Key words: corporate, agribusiness, financing, strategies

Introduction

The definition of SMEs varies from one country or continent to another, as provided by the World Bank or International Finance Corporation (IFC). In terms of need for finance, the IFC defines an SME as: Small Enterprises: Loan Size of \$10,000 to \$100,000, Medium Enterprise: Loan Size of \$100,000 to \$1 million. MSMEs (2007), An enterprise employing more than 50 people, with annual sales turnover of more than Ush 360 million and total assets of more than Ush 360 Million(UNEP FI, 2008)

A large body of evidence shows that SMEs, especially young firms, contribute greatly and increasingly to the innovation system by introducing new products and adapting existing products to the needs of customers on the market. In Uganda small and medium enterprises have increased across sectors ranging from production to marketing enterprises (OECD, 2004). This justifies the number of activities which make up these SMEs. The activities of SMEs along the value chain represent a great deal of carbon footprint. I.e. Activities involving carbon emissions contribute to carbon footprint and it is a measure of the impact a product or particular activity has on climate change.

However, Uganda is lagging behind in taping the benefit resulting from available carbon markets yet more companies and small enterprises are generating a lot of carbon. This has been enhanced by the limited extent to which investors include climate change in their mainstream investment decisions (Headland, 2007), yet this could be important for agribusiness development.

Increasing scientific knowledge, regulatory pressure, and growing societal unease about the potential impacts of climate has already stimulated corporate concern over the risks imposed by climate change. As a consequence, climate change is rising on corporate boards' agendas (McKinsey, 2007). A majority of global executives regard climate change as strategically important and consider it essential to product development, investment planning, and brand management. In addition, 60 Percentage of global executives say that the effect on profits would be moderately to highly positive should their company successfully manage climate change issues (Economist, 2009)

The Star 2010 at the UNCC2009 Copenhagen, the Prime Minister of Malaysia, Datuk Seri Najib Tun Razak announced that Malaysia agreed to reduce its carbon dioxide emissions to 40 Percentage by 2020 compared with 2005 levels, subject to assistance from developed countries in the form of technology transfer and adequate financing. According to UN data, Malaysia's

carbon emissions in 2006 stood at 187 million tonnes or 7.2 tonnes per capita, one of the world's highest per capita (Jennifer, 2010).

The ability of the private sector to contribute to agribusiness development through investment in emerging concepts like climate change is challenged by lack of awareness, inefficient governance structures, lack of specialised staff and limited access to efficient technology and finance (ESA BMO Network, 2010). This may need complex process of taking core business competencies and marrying them with stakeholder analysis. Companies with a skilled workforce can convert these core competencies and integrate them throughout the organizational structure and will achieve a competitive advantage and proactively address their stakeholder interests. These companies will benefit from the enhanced reputation that comes from placing the highest value on people and carrying out actions that are consistent with these values (Dan O'Brien J. Mack Robinson, 2001)

The portfolio strategies frequently contribute to the innovation management and as a principle to managing risks among companies for competitiveness. Therefore, providing training for company employees provides further opportunities and skills to meet criterion in targeting agribusiness development initiatives. Encouraging FDI and international project developers to enter the specialised markets more easily as well, it enables existing project developers to replicate emerging concepts to meet investor and customer needs. This provides the link between this research and the suggested Integrated Carbon Financing Model. However, the study focused on how employee's factors affect competitiveness of private sector SMEs in Uganda.

Methods and materials

One hundred (100) randomly selected respondents composed of 70 customers and 30 employees from different SMEs and companies were selected for this study. Primary data were collected by use of questionnaires. The questionnaire was constructed based on the Likert grading scale (Kavindra Mathi, 2004). Focus group discussions were held with key informants in business and public sectors.

To understand how different factors affect competitiveness of SMEs, corporate carbon financing was assessed using Principal Axis Factor analysis. Factor analysis is based on the assumption that all variables are correlated to some degree. Factor analysis is an appropriate tool for grouping similar variables. All factors with eigen-values greater or equal to 1.0 and a minimum correlation coefficient greater than 0.3 contain a substantial amount of variations were retained

for further analysis (Gwali, 2011). In order to minimize cross loading of variables, all variables with communalities less than or equal to 0.6 were excluded from the analysis to achieve the best grouping patterns. Competitiveness was determined based on market share, attitude and competence. Relationships that were significant at 95% confidence level ($p < 0.05$) were then subjected to multi regression analysis to assess the effect of background information on policy factors and company data.

Results

Table 1: Percentage responses for employee factors and competitiveness of SMEs

Statements on Employee Factors	Percentage Responses						
	SA	A	UD	D	SD	Mean	StD
Am aware the company strategies facilitate carbon financing opportunities	6.7	40	23.3	6.7	23.3	3.0	1.313
Believe climate change is an issue among our customers	30	40	20	6.7	3.3	3.87	1.042
Aware of the short production life cycles are key to carbon emission reduction and save company operational cost	13.3	43.3	13.3	3.3	26.7	3.13	1.456
Am planning a climate change related activity or campaign in the next 4 month	6.7	33.3	33.3	3.3	23.3	2.97	1.275
Average Mean.3.3, Average StD 1.272							

SA= Strongly Agree A=Agree UD= Un decided D=Disagree SD=Strongly Disagree

Most respondents believe that climate change is an issue among customers as shown by the high mean response of 3.87 ± 1.042 SD. This is because, employees are always in contact with the customers that, they evaluate customer needs and willingness to buy particular company products based on their desires due to climate change impacts. Therefore, employees get the feedback about the market needs and then plan and develop processing and marketing strategies that suit the market. Because, climate change among the customers is becoming a reality given the existing campaigns and advocacy groups for companies to have better ways they can offer products on the market which are environmentally friendly.

Fourty percent of the respondents agreed that they were aware of the company strategies facilitating carbon financing opportunities, 6.7 percent disagreed while 23.3 percent remained undecided. This was because many companies are coming up with proposals and strategies targeting climate change related activities. Including training on the how to harness carbon trade opportunities but this should be targeting SMEs and education institutional important in developing models and technologies to drive unique areas in the planning for SMEs competitiveness.

Approximately 40 percent of the respondents were aware that the short production life cycles are key to carbon emission reduction and saves company operational cost, 3.3 percent disagreed and 26.7 percent strongly disagreed. It's because energy loss affects and always is an issue in the operations of companies and SMEs. This has affected company output. Therefore, to remain competitive there is need to save on the amount of energy consumed by having short production cycles. However, big companies need to begin investing in SMEs to promote practices which can save energy or encourage energy reduction to enable SME boost production levels that can meet market demands.

On matters of planning climate change related activities or campaign in the next 4 month, the study revealed 33.3 percent of the respondents agreed and 3.3 disagreed. Given that companies, SMEs and employees are getting the impact of climate change, employees are taking initiatives to mainstream climate change related activities through corporate social responsibility. These activities should go beyond the corporate social responsibility and embrace carbon trade to be able to benefit from climate change activities by considering amount of carbon saved through tree planting activities among the communities.

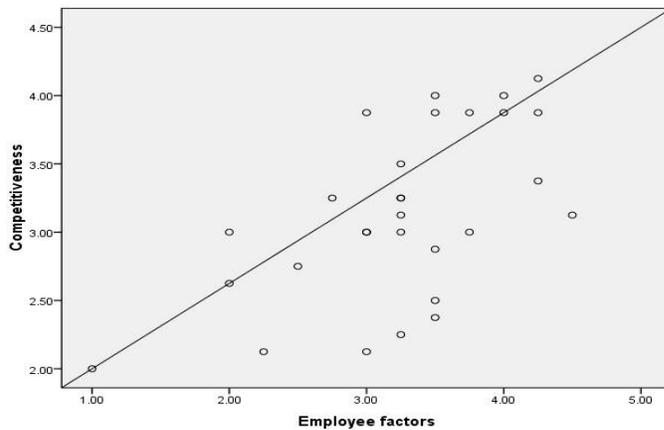


Fig.1 Relationship between employee factors and competitiveness

The linear pattern emerged between both variables revealing a relationship. Pearsons-Product moment correlation coefficient was computed following the formula;

$$r_{xy} = \frac{n(\sum xy) - (\sum x)(\sum y)}{\sqrt{\{(n\sum x^2) - (\sum x)^2\} \{n(\sum y^2) - (\sum y)^2\}}}$$

Where n - is the number of paired observations, $\sum xy$ is the sum of the gross product of employees factors and competitiveness, $\sum x^2$ is the sum of all the squared values of employee

factors, $\sum y^2$ is the sum of all the squared values of competitiveness, $(\sum x)^2$ is the sum of employee factors squared and $(\sum y)^2$ is the sum of competitiveness and squared and below are the results in table 2:

Table 2: Correlation between employee factors and competitiveness of SMEs

Correlations		Employee factors	Competitiveness
Employee factors	Pearson Correlation	1	.602**
	Sig. (2-tailed)		.000
	N	30	30
Competitiveness	Pearson Correlation	.602**	1
	Sig. (2-tailed)	.000	
	N	30	30

** . Correlation is significant at the 0.01 level (2-tailed).

The correlation between employee factors and competitiveness of SMEs was found to be highly significant ($r = 0.602$, $p < 0.001$). This implied that if employee factors are improved there is a likelihood that the company strategies become competitive and if not improved, companies would be less competitive.

However, a regression analysis determined the casual effect of combined factors on competitiveness, and results of the study were computed basing on the linear regression model of $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \dots + \beta_n X_n + \varepsilon$ where Y -is the dependent variable, X_{1-n} - are the independent variables, β_0 is the constant, β_{1-n} - are the regression coefficients or change induced in Y by each X and ε is the error.

Table 3. Results of multiple regressions of factors and competitiveness of SMEs

Coefficients ^a		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	T	Sig.
1	(Constant)	1.350	.650		2.078	.048
	company factors	.179	.165	.192	1.086	.288
	Employee factors	.423	.146	.519	2.896	.008
	customer factors	-.049	.133	-.059	-.370	.715
2	(Constant)	3.264	1.131		2.886	.009

company factors	.193	.134	.208	1.439	.164
Employee factors	.369	.119	.453	3.091	.005
customer factors	-.100	.112	-.119	-.896	.380
company Data	-.780	.243	-.438	-3.210	.004
Personal Background information	-.087	.263	-.045	-.332	.743
Policy Factors	.141	.120	.154	1.175	.253

a. Dependent Variable: Competitiveness

From the table 3 above the multiple regression in Model1 revealed that employee factors were positive ($p < 0.05$). A unit increase in employee factors could lead to an increase in competitiveness, when other factors are constant. The study showed that employee factors are number one predictor of competitiveness of SMEs.

Discussion

The implications of climate change need effective business support system for companies and institutions. The support system requires high level skills for enhanced competitiveness and productivity. Capacity building is, therefore, a key condition for the success of both trade and investment (OECD 2004, Dan O'Brien, 2001).

The private sector has the ability to contribute positively to the effects of climate change through efficient governance structures and addressing other challenges targeting agribusiness development. However, this will need specialised staff to plan for the critical success and reduced operational risk in the business development. For example limited and inaccessible energy efficient technologies and finance (ESA BMO Network, 2010). This has greatly slowed down the transition to climate change awareness among businesses. It's vital that companies develop strategies which respond to carbon financing strategies to target SMES.

The awareness level of company employees on opportunities that exist on the markets determines the extent to which such companies integrate company strategies. A majority of global executives regard climate change as strategically important and consider it as essential to product development, investment planning, and brand management. In addition, over 60% of global executives say that the effect on profits would be moderately too high and positive should their companies successfully manage climate change issues (Economist intelligence unit limited, 2009).

Companies and employees found it that climate change is an issue among customers including the alternative to saving energy and adapting short production life cycles. However, management

of the production process is key to carbon emission reduction strategy and cost effective way to saving operational costs and varying market demands. As a consequence, climate change is rising on corporate boards' agendas (McKinsey 2007). Many companies are coming up with proposals and strategies including training on the how to harness the carbon trade opportunities but this need to target agribusiness activities of SMES for their competitiveness.

Employees are always in contact with the customers in that they even evaluate customer needs and willingness to buy particular company products based on their desires. Therefore, employees get the feedback about the market needs and then plan and develop processing and marketing strategies that fits the market. The employee potentials and commitment to understand business development and risk management ensure corporate strategies for competitiveness.

The practice of corporate companies considering carbon trade in their operations can turn climate change risks into opportunities. This should be done through capacity building for example, Deutsche Bank introduced energy-saving mortgage loans to customers for the upgrading works of home energy conservation and renewable energy installations and this can define competitiveness. The international community has set up some self-regulatory organizations, which promote green finance and supervise the financial institutions engaging in sustainable finance, whose members are from the banking industry, insurance and securities companies and other financial institutions in the world (UNEP FI, 2007)

However, big companies have potential to invest in SMEs and employee competencies, attitude to have practices which can save on energy or encourage energy production to meet their market demands. SMEs have limited ability and therefore to boost SMEs efforts to mitigate carbon effects can lead to increased business investments in water, energy, natural resource management, hence impacting on company profit margins, economic and social indicators within the context of the Poverty Eradication (MFPED 2008).

Given the facts that companies, SMEs and employees are getting impact of climate change, employees are taking initiatives to mainstream climate change related activities through corporate social responsibilities .

But this approach can embrace carbon trade to encourage agribusiness investment such that they are able to benefit from climate change activities by considering amount of carbon saved through tree planting and value addition activities among the communities. Indirect investment and financing “Equator Principles” has gradually become an international industry standards and

practice in project financing. Foreign commercial banks actively participate in environmental financial innovation, the carbon trading and providing intermediary services for families and SMEs (Yuechun Wen, Yingzi Wu, 2010).

Conclusion and recommendation

In conclusion, creating new synergies through Mergers and Acquisitions should put in consideration for the capacity building. This will strengthen carbon trade Practitioners and risk understanding in commercialising agriculture for agribusiness development. However, Mergers, climate change insurance policies and acquisitions are areas that may provide opportunities for the companies and SMEs as an effective way for companies to cut costs and risks of uncertainty and achieve synergy in financial and new concepts in the market including gaining growth in global market.

The presence of planning in analysed enterprises should form sustainable strategy and become very useful irrespective of company and SMEs segment. Focusing on competitive carbon trade activities in Sub Saharan Africa will be key to invite investors for direct investment which will be explained by direct use of market initiatives answering the emerging concepts in the areas of energy, manufacturing and agriculture projects.

Integrated approach to carbon trade could play a critical role in integrating the carbon trading systems to take advantage of the unique environment in the market. This will close the existing carbon gap in trading systems initiating adoption of innovative competitive strategies to market niches and segments in society and globally.

This research recommends Integrated Carbon Financing Model (ICFM) in figure 2, below could bring life to agribusiness development and SMEs investment based on individuals expertise, public- private sector institutions for direct involvement in carbon policy, market adjustment.

The model is developed focusing on government, business community, market and niche segments and Social values i.e. providing a clear mode for carbon investments and revenue, increasing the investor confidence, flexibility and carbon emission response strategy in the country to suggest sustainable means to institutional mode to capacity building targeting the salient emerging opportunities.

From the Fig. 2 below, the arrows indicate the lines of communication and investment pathways or commitment in the markets in terms of carbon revenue, information exchange on carbon investment opportunities, initiatives and regulations.

Investors need information based on their potential to invest including particular characteristics of the market segments and opportunities that exists with the market. For example resources related to investment may not need serious procedures resulting from the markets. It may require individual expertise which is to be targeted.

However, carbon regulatory framework could be applied to investments which provide a stream of revenue to the investors that individual governments can benefit from such investments through taxes and revenue flow for economic development.

Therefore, all these will depend on the competitiveness factors such as competence, attitude and market share commended by companies and SMEs. Governments need revenue and societies need income to improve on their standards of living. The business systems in finance and markets where major production systems to be supported with minimal marketing strategies carbon markets is not different.

The ICFM puts into 2 pillars:

Revenue generation for the country economy

Generating participation for niches and segments in society to benefit from carbon trade.

3. Helping developing sub Saharan African countries initiatives adapt carbon trade actions for wider capital and market gains including agribusiness development.

The overall goal of the HICF model is to initiate appropriate and integrated approached to carbon trade for increased benefit for societies, SMEs and companies for improved livelihoods.

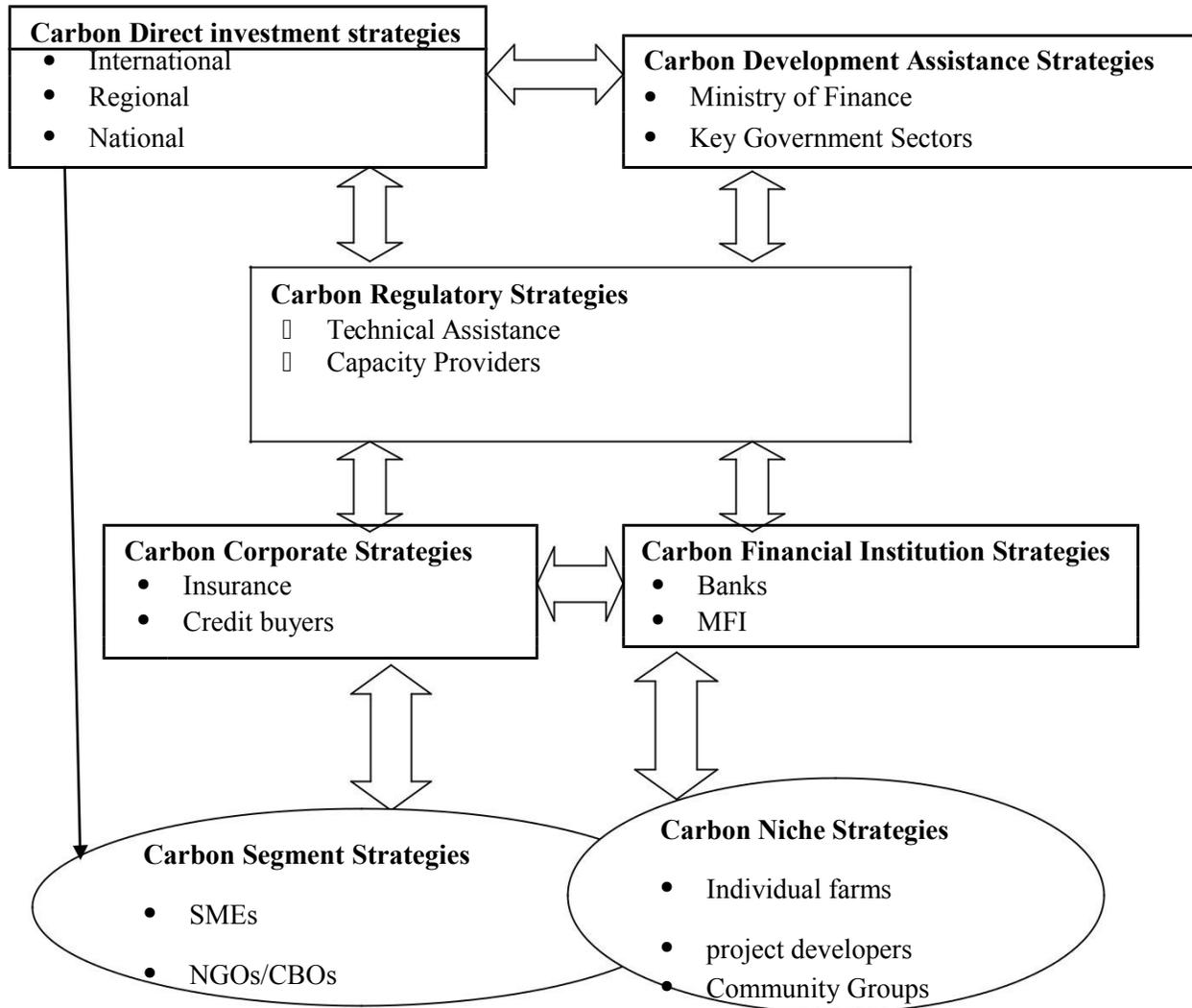


Fig 2 : Hypothetical Integrated Carbon Financing Model (ICFM) (kalimunjaye.s et al 2012)

Acknowledgements

We thank the ANAFE who supported this paper to be presented at the international symposium, the Faculty of Business Administration and management of Uganda Christian University Mukono of Uganda and the National Agricultural Research Organisation/National Forestry Research.

References

2ND OECD. 2004. Promoting Entrepreneurship and Innovative SMEs in A Global Economy: Towards A More Responsible and Inclusive Globalization. Conference of Ministers Responsible For Small and Medium-Sized Enterprises (SMEs), Istanbul, Turkey.

Cornelius Kazooru. 2007. Environment and Natural Resources as a Core Asset in the IGAD Region for wealth creation, Poverty Reduction and Sustainable Development Uganda's Draft MSMEs Policy and Strategy Uganda, East Africa.

Economist. 2009. A report from the Economist Intelligence Unit. How business can survive and thrive in turbulent times, Organizational agility: A report from the Economist Intelligence Unit Sponsored by EMC.

ESA BMO Network. 2010. Insert title of conference!. Annual Conference, Stanley Hotel, Nairobi 23rd – 24th February, 2010.

Gwali.S. 2011., Taxonomic diversity, distinctness, and abundance of tree and shrub species in Kasagala forest reserve in Uganda: implications for management and conservation policy decisions. *Tropical Conservation Science* Vol.3 (3):319-333, 2010.

Headland, June. 2007. The debate on climate change affected institutional investment behavior, A report commissioned by The HeadLand Consultancy.uk

Jenifer. 2010. Business should lead against climate change, The Star Copenhagen

Kalimunjaye .s. 2012. Carbon Trade Financing Strategies and Opportunities for Competitiveness of Private Sector SMEs in Uganda *Journal of Technology and Investment, American Scientific Research*

Karavai M. 2009. Conceptualizations of Sustainability in the Context of Voluntary Carbon Market. MSc thesis Submitted to Lund University Sweden.

Mathi K .2004. Success Factors for Knowledge Management Master Thesis, MBA: International Business Management & Consulting. Internationales Hochschulinstitut indau, University Of Applied Sciences/ Fh Kempten, Germany

O'Brien D. J., Robinson M. 2001. Integrating Corporate Social Responsibility with Competitive Strategy. College of Business Georgia State University.

UNEP FI. 2007. Finance Initiative, innovative financing for sustainability.

UNEP FI. 2008. Innovative financing for sustainable samall and medium enterprises in africa. Geneva, Switzerland page 6.

W. Y.W.Yuechun. 2010. the Study on the Status and the Countermeasures of Low-Carbon Financial System of China