

# THE INTERNATIONAL JOURNAL OF BUSINESS & MANAGEMENT

## Innovative Entrepreneurship and Development of SME Opportunities among Agricultural Entrepreneurs in Akwa Ibom State, Nigeria

**Ben, Isaiah Peter**

M.Sc. Student, Department of Business Administration,  
Akwa Ibom State University, Nigeria

**Dr. Christabel Brownson**

Senior Lecturer, Department of Business Administration,  
Akwa Ibom State University, Nigeria

### **Abstract:**

*This study aims to check the association between innovative entrepreneurship and the development of SMEs' opportunities. The research context is Akwa Ibom State.*

*159 respondents, who were agricultural entrepreneurs drawn from 9 centres in Uyo and Etinan Agricultural zones of Uyo senatorial district, were examined using a quantitative method. Results revealed that a close relationship between innovative behavior, risk-taking, and the development of SMEs' Opportunities exists among Agricultural Entrepreneurs.*

*Innovative behavior had a significant relationship with the number of SMEs' opportunities utilized by entrepreneurs in the study area [( $p < 0.05$ ) with  $r = 0.298$ ]. At the same time, risk-taking did not show any significant association ( $p > 0.05$ ) with  $r = 0.071$ . This implies that innovative behaviour is an essential trait influencing entrepreneurial development among Agricultural Entrepreneurs in the Uyo Senatorial district of Akwa Ibom State. As such, innovative behaviors should be highly encouraged and nurtured among Agro entrepreneurs, promoting the development of new and innovative agro-ventures in the state.*

**Keywords:** *Innovative behaviours, development, small and medium enterprise, entrepreneurial opportunities, agricultural sector*

### **1. Introduction**

Agricultural restructuring and the growth of vertical integration within the food and agri-business industries have recently become the main focus of government and stakeholders in the Agricultural and economic sectors. However, despite this development, the sector in Akwa Ibom State is saturated both by the persistence of owner-operated farms with very few strategically sophisticated markets and supply-chain relationships among rural farmers. As a result, the Nigerian agricultural sector is presently facing dwindling financial investment and slow economic development. This has led to increased importation of food products, food insecurity, low GDP, food prices, unemployment, and crimes in Nigeria. These indicators worsen Nigeria's economic growth and have driven poor rural households into extreme poverty.

The above implies that Nigeria is performing poorer in terms of agricultural development compared to nations like Malaysia and others who have exploited the numerous agricultural opportunities to create an enviable economy. Many agricultural entrepreneurs still produce at very low capacity with almost no value addition, while some have diverted from agriculture to other ventures. This suggests not only inefficiency and failure but also losses and lack of creativity/innovativeness, which sum up to under development.

Entrepreneurship development is essential for exploiting the full potential of agro-industry on the one hand and providing job opportunities to the teeming population of the country on the other hand. If agriculture must develop, the entrepreneurial behavior of the farmers must improve. Farmers must be creative and innovative. The federal government has banned foreign agricultural products like the importation of rice, frozen chicken, fish, meat, cereal, and foodstuff, among others. Therefore, substantial effort must be directed by the government and its agencies to ensure the sustainable use of agricultural resources for maximum socio-economic benefits in all agricultural sectors through entrepreneurial development.

The innovativeness of Agricultural entrepreneurs is still questionable, considering their response to new venture opportunities in Agriculture and value addition, especially in the present administration, where the focus of the government of the time is on agriculture. Indeed, this is when agricultural entrepreneurs in every state of the nation should be exploited if they are innovative enough to utilize this enormous opportunity. Therefore, keeping in mind these

variables, the present research focuses on the innovativeness of Agric entrepreneurs as a construct that affects their entrepreneurial behaviour and agricultural development.

### 1.1. Objectives of the Study

- Investigate the relationship between innovative behaviour and the development of small and medium enterprise opportunities among agricultural entrepreneurs in the Uyo Senatorial district of Akwa Ibom State.
- Determine the relationship between risk-taking and development of small and medium enterprise opportunities among agricultural entrepreneurs in the Uyo Senatorial district of Akwa Ibom State.

### 1.2. Statement of Hypotheses

The following hypotheses were formulated to guide the study:

- H<sub>01</sub>: There is no significant relationship between innovative behaviour and the development of small and medium enterprise opportunities among agricultural entrepreneurs in the Uyo Senatorial district of Akwa Ibom State.
- H<sub>02</sub>: There is no significant relationship between risk-taking and the development of small and medium enterprise opportunities among agricultural entrepreneurs in the Uyo Senatorial district of Akwa Ibom State.

## 2. Literature Review

Innovative entrepreneurship is a role of the entrepreneur in the economy as 'creative destruction', which is his ability to launch ideas that simultaneously destroy old industries while ushering in new industries and approaches (Lauterbach-Hagan, 2010). According to Lauterbach-Hagan (2010), the changes and dynamic disequilibrium brought on by the innovating entrepreneur are the norms of a healthy economy. While entrepreneurship is often associated with new, small, and for-profit start-ups, entrepreneurial innovativeness can be seen in small, medium, and large-sized firms, new and established firms, and for-profit and not-for-profit organizations, including voluntary-sector groups and charitable organizations. Lauterbach-Hagan (ibid.) emphasized innovation as a basic element of entrepreneurship. He pointed out that 'an entrepreneur is an economic man who tries to maximize his profits by innovation.

Innovation involves problem-solving, and the entrepreneur gets satisfaction from using his capabilities in attacking problems.' However, he added that the modern concept of entrepreneurship is much wider and does not confine to any single aspect like risk-bearing, promotion, decision-making, or innovation. Thus, Lauterbach-Hagan defines innovative entrepreneurship as 'the function of seeking investment and production opportunity, organizing an enterprise to undertake a new production process, raising capital, hiring labour, arranging the supply of raw materials, finding a site, introducing a new technique or commodity, discovering new sources of raw materials and selecting top managers for day-to-day operations of the enterprise'.

### 2.1. Innovative Behaviour

To the De Mel (2009), innovation is viewed as vital in ensuring competitive advantage by entrepreneurs and long-term loyalty. The importance of innovation as a key factor in economic development was highlighted by Joseph Schumpeter in his Theory of Economic development (1934). He considered the entrepreneur's task and capacity to realize new combinations of the production factors, and innovations, as the basis of theory. According to Casals (2011), globalization of the markets and increasing international competition force entrepreneurs to search for new, innovative, flexible, and imaginative ways to survive. This provides a basis for agricultural entrepreneurs to innovate to survive.

Moreover, innovation is essential in today's knowledge-based society for entrepreneurial development, although there is limited evidence of this in emerging economies. However, entrepreneurs need to continuously innovate to reduce production costs, delivery schedules, manufacturing skills, and supplier relationships, among other business practices (De Wit & Meyer, 2007). Schumpeter (1942) was the first who linked innovation to entrepreneurship.

Innovativeness refers to a willingness to support creativity and experimentation to introduce new products and services, technological leadership and research, and develop new processes (Lumpkin & Dess, 2001). If innovativeness reflects a tendency for an enterprise to engage and support new ideas, novelty, experimentation, and creative processes (ibid.), and if individuals with self-actualization, need desire work that is more creative and innovative, then innovativeness might be associated with needs at a higher level of the hierarchy of needs as conceived by Maslow (1987).

### 2.2. Risk-Taking Propensity

Risk-taking refers to a tendency to take bold actions such as entering unknown new ventures or markets, committing a large portion of resources to ventures with uncertain outcomes, or borrowing heavily (ibid.). Miller and Friesen (2004) described risk-taking as part of the strategy-making process of an organization. Entrepreneurial development is a strategic attitude; therefore, risk-taking should be part of it. However, scholars cannot find consistent patterns while investigating risk-taking in relationship with entrepreneurship. Naldi *et al.* (2007) suggested that the context in which an entrepreneur operates influences the amount of risk it takes.

Furthermore, most studies have focused on individual risk of new entry instead of considering the firm level (Lumpkin & Dess, 1996). Risk-taking has long been associated with good entrepreneurial performance (Bearse, 2008). An early definition of risk-taking centered on the willingness of entrepreneurs to engage in calculated business risk, which in the end, leads to high enterprise performance (Brockhaus, 1980). Studies have revealed that entrepreneurs that take risks perform better in terms of profitability than those who do not (Bearse, 2008). Such firms are also expected to have better performance and a higher level of risk propensity (Leko-simi and Horvart, 2006).

Leko-simi and Horvart (2006) defined risk-taking propensity as a tendency to take or avoid risk and is viewed as an individual characteristic. The positive relationship between risk-taking propensity and risk decision-making by individuals is expected to translate to organizations through top management teams, hence the high performance of the entrepreneur (Panzano and Billings, 2005). Risk-taking is necessary to support both innovativeness and pro-activeness in entrepreneurship (Miller & Frienson, 2004). In addition, risk-taking fosters organizational creativity (Shalley & Gilson, 2004).

Gupta and Govindarajan (1984) found that risk-taking positively influences the effective implementation of entrepreneurs' strategies aimed at high performance.

### *2.3. Development of SMEs' Opportunities in the Agricultural Sector*

Agricultural enterprises' economic contributions are vital for both advanced and developing countries. Findings reveal that the sector employs more than 60% of modern employees (Matlay & Westhead, 2005). In developing countries, agriculture employs 22% of the adult population, and agric enterprises are the major source of employment opportunities for a wide cross-section of the workforce: the young, old part-time workers, and the cyclically unemployed. In the past, agriculture in Nigeria represents about 90% of the industrial sector in terms of the number of enterprises. It also accounts for 70% of national industrial employment if the threshold is set at 10-50 employees; it contributes 10% of manufacturing output and meager and 1% of gross domestic product (GDP) (Ajayi, 2002). Agricultural centers and firms are the driving force for economic growth, job creation, and poverty reduction in developing countries. Furthermore, agro and agro-allied industries have been recognized as a feeder service to large-scale industries (Fabayo, 2009).

In Agricultural enterprise, farmers can exploit several opportunities in every sub-sector to expand their business. For instance, most crop and livestock farmers in the last decades revolved around farm cultivation of crops or the rearing of livestock. However, recently, some farmers have delved into new opportunities like processing their products and packaging their products. Again, new livestock sectors have recently emerged to increase the scope of livestock production like mushroom farming, snail farming, and grass cutter farming, among others. In contrast, new opportunities in the crop sector include coconut juice production, production of weed killer, beekeeping and honey production, hatchery, florist, poultry and meat production and packaging, spices production, baking, soya beans processing, quail egg farming, flour milling, basket and broom production, local drinks or dry gin production and a host of others. In poultry production, frozen chicken production is another venture in recent times, while the forestry sector is not left out with diverted attention in the firewood business. Every sector has witnessed tremendous innovations, especially in developed economies, but these have not been widely embraced in developing nations, including Nigeria. This has questioned the farmers' innovativeness, such as their proactive approaches to capturing new venture opportunities in the Agricultural sector.

### *2.4. Investment Opportunities in Agricultural Sector*

The Agricultural sector contributes just a little over 20% to the overall GDP of the country even though it can be much more. The agricultural sector is one of the most flourishing sectors of the Nigerian economy.

#### 2.4.1. Cassava Farming

With the increasingly diverse use of cassava products in Nigeria, cassava farming is getting more lucrative daily. Over 90% of Nigerian households consume cassava products every day. Some popular meals made out of cassava are: garri, wheat-flour, animal feed, commercial caramel, and a lot more.

#### 2.4.2. Poultry Farming

Poultry farming is the process of raising domesticated birds such as chickens, ducks, turkeys, and geese for the purpose of farming meat or eggs for food. Poultry Farming in Nigeria is probably one of the most lucrative farming businesses you can do.

#### 2.4.3. Rice Farming

Nigeria is the largest producer of rice in West Africa and the third in Africa after Egypt and Madagascar producing about 3.6 million metric tons on the average annually. Interestingly, Nigeria still falls short of meeting its local demand, which is placed at about 5.5 million tons. However, considering the fact that Nigeria has a huge market for rice, this is one of the most profitable businesses in the Nigerian agricultural section for entrepreneurs to invest in.

#### 2.4.4. Snail Farming

Snail farming is considered to be one of the most lucrative agribusinesses one can start with low capital in Nigeria today. However, it is one of the country's most neglected animal rearing businesses. Therefore, snail farming in Nigeria provides one of the finest opportunities to make money within a short period of time.

#### 2.4.5. Catfish Farming

There are many kinds of fish growing in Nigeria, however, many people like catfish because its meat is juicy, soft, and tasty. However, not everyone knows that this fish can be grown relatively quickly even at a small fish farm. You can even organize catfish farming at home.

#### 2.4.6. Maize Farming

The Maize farming business has definitely been thriving in Nigeria for decades. Maize, which is also commonly known as corn, is one of the most popular food crops in Africa.

#### 2.4.7. Pig Farming

Pig farming in Nigeria is one of the lucrative and profitable livestock businesses. Commercial pig farming is beneficial because pigs are prolific breeders and can deliver 10 to 14 piglets in a single birth. The pork market in West Africa alone accounts for about \$3 billion in consumption value. 80% of that is sourced by importation. That is a lot of untapped revenue (Okai, 2019)

#### 2.4.8. Honey Bee Farming

Honey is one of the oldest sweeteners on earth. Lucky for us, it also has many health benefits and uses. Keeping bees at a large scale for commercial purposes as a business plan is increasing in this fast-growing world.

#### 2.4.9. Mushroom Farming

Mushrooms are among the most underexplored foods that are majorly exploited from the wild and popular diet of the low-income class in Nigeria. While the origin of the mushroom-human relationship remains unclear, humans' uses of mushrooms in recent decades have experienced unprecedented advancement across cultures all over the world and potentiate the current paradigm in preponderating mushroom cultivation as well as their established global market. Nigeria has relapsed on gross domestic products and crude oil production with a compulsive reconsideration of agriculture as a suitable alternative remedy. The acceptance and listing of mushrooms as a cash crop and mushroom products as agricultural produce complements extant agro-income sources for the country (Osemwegie & Dania, 2016).

#### 2.4.10. Grasscutter Farming

The shortage of animal protein in third-world countries can be ameliorated by improving the existing conservation programme of wildlife, particularly the domestication of rodents that are tractable, prolific, and widely accepted by the public for consumption. Captive breeding of game species as a possible way to satisfy local demand without compromising the wild stock has also been recommended by several authors (Mbah, 2009, Auzel and Wilkie, 2000, Bennett and Robinson, 2000). Grasscutter or cane rat has been suggested as one of the mini livestock having potential for domestication.

### 3. Methodology

A survey research design approach was adopted for the study. The study population comprised 159 owners or managers of Agricultural enterprises in the Uyo Senatorial District of Akwa Ibom State. Data collected were analyzed with the Correlation analysis to ascertain the relationship between the independent and dependent variables. The test was carried out at a 95% Confidence interval, with a 5% (0.05) significance level. The reliability was determined through the Cronbach alpha reliability test. The resulting coefficient for 20 items was 0.842. Since the result co-efficient was above the threshold of 0.5, the instrument was ascertained to be reliable and was adopted for the study.

### 4. Analysis

- Research Question One: Relationship between Innovative Behaviour and development of Small and Medium Enterprises Opportunities in the study area.

Variable	Mean	$\sum X$	$\sum X^2$	$\sum XY$	r
		$\sum Y$	$\sum Y^2$		
INB (X)	3.93	624	2524	1924.2	0.298**
NVO (Y)	2.98	474	2036		

Table 1: Relationship between Innovative Behaviour (INB) and Development of Small and Medium Enterprises Opportunities (NVO) among Agric Entrepreneurs in Uyo Senatorial Distribution of Akwa Ibom State  
N = 159, Df = 157, \*: Significant at P < 0.05

Table 1 shows the correlation coefficient between innovative behaviour and the development of Small and Medium Enterprises opportunities in the study area. The result shows that innovative behaviour relates positively to the development of Small and Medium Enterprises opportunities in the study area ( $p < 0.05$ ) with a correlation coefficient of 0.298. The significant correlation coefficient indicates a strong and direct relationship between innovative behavior and the development of Small and Medium Enterprises opportunities in the study area. A positive correlation implies that the engagement of the entrepreneurs in new venture opportunities can improve to a significant extent if their innovative behaviour improves and *vice versa*. This result has affirmed that innovativeness is about an individual's initiatives, defined mainly by his skill level and attitude toward new opportunities in his area. This agrees with the finding of Lumpkin and Dess (1996), who maintained that an entrepreneur is always looking for opportunities to improve and expand his business. Hence, Agro entrepreneurs in the Uyo Senatorial district of Akwa Ibom State are passionate about growing their businesses and constantly looking for new opportunities to exploit.

- Research Question Two: Relationship between Risk-Taking and Development of Small and Medium Enterprises Opportunities

Variable	Mean	$\Sigma X$	$\Sigma X^2$	$\Sigma XY$	r
		$\Sigma Y$	$\Sigma Y^2$		
RST (X)	4.24	674	2893.84	2020	0.071 <sup>ns</sup>
NVO (Y)	2.98	474	2036		

Table 2: Relationship between Entrepreneurial Risk-Taking (RST) and Development of Small and Medium Enterprises Opportunities (NVO) among Agric Entrepreneurs in Uyo Senatorial Distribution of Akwa Ibom State = 159, Df = 157, \*: Significant at  $P < 0.05$

Table 2 shows the correlation coefficient between risk-taking and the development of Small and Medium Enterprises' opportunities among agro entrepreneurs in the study area. It is evident from the result that risk-taking shows a positive relationship with Small and Medium Enterprises opportunities in the study area ( $p < 0.05$ ) with a correlation coefficient of 0.071. However, the correlation was not significant ( $P > 0.05$ ), implying that risk-taking is not a major factor when it comes to exploiting new opportunities by the entrepreneurs in the study area. The result indicates that these entrepreneurs have owned ability and courage to take risks in the face of Small and Medium Enterprises' opportunities. This agrees with the assertion of Miller and Friesen (2004) that an entrepreneur likes to take calculated risks and assumes responsibility for both profits and losses. Hence, risk-taking should be part of the strategy-making process of an organization.

#### 4.1. Test of Hypothesis

The value of the t statistic was estimated from the sample correlation coefficient r, using the expression:

$$t^* = \frac{r}{\sqrt{(1-r^2)/(n-2)}} = \frac{r\sqrt{n-2}}{\sqrt{1-r^2}}$$

Where  $t^*$  is the t calculated

#### 4.2. Hypotheses

- $H_{01}$ : There is no significant relationship between innovative behaviour and the development of Small and Medium Enterprises opportunities among agricultural entrepreneurs in the Uyo Senatorial district of Akwa Ibom State.

Variable	Mean	$\Sigma X$	$\Sigma X^2$	$\Sigma XY$	r	$t^*$
		$\Sigma Y$	$\Sigma Y^2$			
INB (X)	3.93	624	2524	1924.2	0.298**	3.912**
NVO (Y)	2.98	474	2036			

Table 3: T-Value and Correlation Coefficient (R) between Innovative Behaviour (INB) and Development of Small and Medium Enterprises Opportunities (NVO) In the Study Area  
N = 159, Df = 157, \*: Significant at  $P > 0.05$

Table 3 shows that  $t^*$  of 3.912 is greater than the critical t-value of 1.645 at a 0.05 level of significance with a degree of freedom (df) of 157. Therefore, the null hypothesis, which states that there is no significant relationship between innovative behaviour and the development of Small and Medium Enterprises opportunities among agricultural entrepreneurs in the Uyo Senatorial district of Akwa Ibom State, is rejected.

- $H_{02}$ : There is no significant relationship between risk-taking and the development of Small and Medium Enterprises opportunities among agricultural entrepreneurs in the Uyo Senatorial district of Akwa Ibom State.

Variable	Mean	$\Sigma X$	$\Sigma X^2$	$\Sigma XY$	R	$t^*$
		$\Sigma Y$	$\Sigma Y^2$			
RST (X)	4.24	674	2893.84	2020	0.071 <sup>ns</sup>	0.892 <sup>ns</sup>
NNE (Y)	2.98	474	2036			

Table 4: T-Value and Correlation Coefficient (R) between Risk-Taking (RST) and Development of Small and Medium Enterprises Opportunities (NVO) in the Study Area  
N = 159, Df = 157, \*: Significant at  $P > 0.05$

Table 4 shows that  $t^*$  of 0.892 is less than the critical t-value of 1.645 at a 0.05 level of significance with a degree of freedom (df) of 157. Therefore, the null hypothesis, which states that there is no significant relationship between risk-taking and the development of Small and Medium Enterprises opportunities among agricultural entrepreneurs in the Uyo Senatorial district of Akwa Ibom State, is accepted.

## 5. Discussion of Findings

### 5.1. Research Question 1: Innovative Behaviour and SMEs' Opportunities in the Study Area

The innovative behavior of agro entrepreneurs in the study area was not only supported by the new product variable; other variables responded to by the respondent showed their high mean scores as well as indicated strong agreement that their innovativeness has attracted the attention of sponsors who have assisted them financially because they were satisfied by their innovativeness. The result shows that entrepreneurial behaviour relates positively to developing new venture opportunities in the study area ( $p < 0.05$ ) with a correlation coefficient of 0.298. The correlation coefficient is significant, indicating a strong and direct relationship between innovative behaviour and the development of new venture opportunities in the study area. A positive correlation implies that the engagement of the entrepreneurs in new venture opportunities can improve to a significant extent if their innovative behaviour improves and *vice versa*. This result has affirmed that innovativeness is about individual initiatives, defined mainly by his skill level and attitude toward new opportunities in his area. This agrees with the finding of Lumpkin and Dess (1996), who maintained that an entrepreneur is always looking for opportunities to improve and expand his business. Hence, Agro entrepreneurs in the Uyo Senatorial district of Akwa Ibom State are passionate about growing their businesses and constantly looking for new opportunities to exploit.

- Hypothesis 1: There is no significant relationship between innovative behaviour and the development of SMEs' opportunities among agricultural entrepreneurs in the Uyo Senatorial district of Akwa Ibom State.

Therefore, the null hypothesis, which states that there is no significant relationship between innovative behaviour and the development of SMEs' opportunities among agricultural entrepreneurs in the Uyo Senatorial district of Akwa Ibom State, was rejected, and the alternate hypothesis accepted. Hence, there is a significant relationship between innovative behaviour and the development of SMEs' opportunities among agricultural entrepreneurs in the Uyo Senatorial district of Akwa Ibom State. This suggests that these entrepreneurs were fairly innovative and aggressive about new opportunities in the area, contributing positively to their enterprises' productivity. This is also in line with the World Bank report (2009) that an innovation mindset is vital in ensuring competitive advantage by an organization and long-term loyalty, which is crucial in economic development.

### 5.2. Research Question 2: Risk Taking and SMEs' Opportunities in the Study Area

Similarly, the risk-taking potential of entrepreneurs in the study area is very high. This is explained by their ability to make a risky decision and not be too careful before making investment decisions. All the variables building each component had a mean score above 4.0 though their magnitude varies. This indicates strong agreement to making a risky decision and not being too careful about risk before making an investment decision. This is good because every business has its own risk, and being afraid of risk is not a good quality for an innovative entrepreneur. An entrepreneur should be ready to take a risk at any time because the risk is the price for new opportunities. The correlation between risk-taking and SMEs was insignificant ( $p > 0.05$ ), implying that risk-taking is not a significant factor while exploiting new opportunities by the entrepreneurs in the study area. The result indicates that these entrepreneurs have owned abilities but are not too courageous in taking a significant risk in the face of new opportunities. This agrees with the assertion of Miller and Friesen (2004) that an entrepreneur likes to take calculated risks and assumes responsibility for both profits and losses. Hence, risk-taking should be part of an organization's strategy-making process, which also agrees with the opinion of Miller and Friesen, who described risk-taking as part of an organization's strategy-making process and opined that entrepreneurial orientation is a strategic attitude and, therefore, risk-taking should be part of it.

- Hypothesis two: There is no significant relationship between risk-taking and the development of SMEs' opportunities among agricultural entrepreneurs in the Uyo Senatorial district of Akwa Ibom State.

The calculated t-value was less than the critical t-value at a 0.05 level of significance. Therefore, the null hypothesis states that there is no significant relationship between risk-taking and the development of SMEs' opportunities among agricultural entrepreneurs in the Uyo Senatorial district of Akwa Ibom. The positive sign implies that an increased chance of making a risky decision by the entrepreneurs leads to an increase in the number of SMEs' opportunities utilized and *vice versa*. This also affirms that these entrepreneurs may not be afraid of taking a risk in their business, provided such risk will bring a return to the investment made. However, a non-significant correlation of risk factors indicates that risk is not a major setback among agro entrepreneurs in Akwa Ibom State.

## 6. Conclusion

It is deduced from the study that agro entrepreneurs in the Uyo senatorial district of Akwa Ibom State are mostly adults and fairly literate; most of them are married with few cases of divorce. Their major enterprise varied from fishery production to crop production/marketing. Their sources of capital are mainly saving and contributions resulting in low liquidity status, low assets, and low net worth. All dimensions of entrepreneurial elements of this study were high in their scores. The effect of these dimensions on the development of SMEs' opportunities revealed that only risk-taking did not have a significant relationship with the entrepreneurs' development of SMEs' opportunities. In contrast, innovative behavior is a significant element influencing number of SMEs' opportunities utilized by these entrepreneurs.

## 7. Recommendations

Based on the findings of the study, the following recommendations are made:

- More innovative behavior should be encouraged among agro entrepreneurs to take advantage of the wide range of opportunities available in their field so as to help create more job opportunities for unemployed youths in the state.
- Government and Non–Governmental agencies in Akwa Ibom State should embark on a loan scheme targeted explicitly at small-scale agro entrepreneurs in Akwa Ibom State to boost up the low capital base of these entrepreneurs for more competitive investment.
- Agro-entrepreneurs should be encouraged to register with professional bodies for easy access to improve skill training and development through such bodies.
- The professional bodies should provide appropriate training and encouragement to young Agro-entrepreneurs to enhance their entrepreneurial capacity.

## 8. References

- i. Ajayi, O. A. (2002). 'Development of small scale industries in Nigeria' being paper presented at Workshop on grassroots' advocacy and economic development. September 11-13.
- ii. Auzel, P. and Wilkie, D. S. (2000). Wildlife use in Northern Congo: Hunting in a commercial logging concession. J.G. Robinson and E.L. Bennett, eds, *Hunting for Sustainability in Tropical Forests*. Columbia University Press, New York, Pp. 413-426.
- iii. Bearnse, P. J. (2008). A study of entrepreneurship by region and SMSA size. In K. Vesper (Ed.), *Frontiers of entrepreneurship research*, pp.78-112. Wellesley, MA, Babson College
- iv. Ben, I. P. (2022). Gender and innovative behaviours of male and female entrepreneurs in Akwa Ibom State. *European Journal of Business and Innovation Research* 10 (2):60 – 78.  
<https://doi.org/10.37745/ejbir.2013/vol20no1pp.60-78>
- v. Bennett, E.L. and Robinson, J.G. (2000). Hunting of wildlife in tropical forests: Implications for biodiversity and forest peoples. Biodiversity Series Paper 76. The World Bank, Washington D.C.
- vi. Brockhaus, R. H. (1980). Risk-taking propensity of entrepreneurs. *Academy of Management Journal*, 23(3), pp. 509-520.
- vii. Casals, F. E. (2011). The SME Co-operation Framework: a Multi-method Secondary Research Approach to SME Collaboration. 2010 International Conference on E-business, Management and Economics IPEDR vol.3. IACSIT Press, Hong Kong
- viii. Cole, R. H. (2018). *Entrepreneurship in institutional context: Actor emergence in transitions from wage-employment to entrepreneurship*: University Press.
- ix. Das Gupta D. (2013), 'The Effect of Gender on Women-led Small Enterprises: The Case of India', *South Asian Journal of Business and Management Cases*, June 2013, Iss. 2, pp. 61-75.  
<https://doi.org/10.1177/2277977913480654>
- x. De Wit, B., and Meyer, R. (2007). *Strategy synthesis: resolving strategy paradoxes to create competitive advantage*. London, UK: Cengage Learning.
- xi. De Mel, S., McKenzie, D. and Woodruff, C. (2009). Innovative Firms or Innovative Owners? Determinants of Innovation in Micro, Small, and Medium Enterprises, *Policy Research Working Papers*, May 2009, <https://elibrary.worldbank.org/doi/pdf/10.1596/1813-9450-4934>
- xii. Fabayo, J. A. (2009). Small and Medium Enterprises development strategy: A critical Option for sustainable Long–Term Economic Development in Nigeria. A paper presented at the first Annual International Conference on Effective Management of Small and Medium-scale Enterprises for sustainable Economic Development held at Abraham Adesanya Polytechnic, Ijebu-Ode held from 25-27 August.
- xiii. Gupta, A. K., and Govindarajan, V. (1984). Business Unit Strategy, Managerial Characteristics, and Business Unit Effectiveness at Strategy Implementation. *Academy of Management Journal*, 27, 25–41.  
<https://doi.org/10.5465/255955>
- xiv. Lauterbach-Hagan, Brian (2010) 'Innovations in e-business: can government contracting be adapted to use crowdsourcing and open innovation?' Monterey, California. Naval Postgraduate School, 2010. <http://hdl.handle.net/10945/10563>.
- xv. Leko-Simi, M. and Horvat, J. (2006). 'Risk-Taking Propensity and Export Performance of Croatian Exporters,' *Managing Global Transitions*, 4 (4), 313–326
- xvi. Lumpkin, G. T., and Dess, G. (1996). Clarifying the entrepreneurial orientation to Construct and linking it to performance, *The Academy of Management Review*, Vol. 21, No. 1 (Jan. 1996), pp. 135-172 (38 pages), <https://doi.org/10.2307/258632>
- xvii. Lumpkin, G.T. and Dess, G. (2001). Linking two dimensions of entrepreneurial orientation to firm performance: the moderating role of environment and industry life cycle. *Journal of Business Venturing*, 16(5), 429-451.
- xviii. Lumpkin, G T. & Dess, G. (2006) The Effect of 'Simplicity' on the Strategy–Performance Relationship: A Note. *Journal of Management Studies*, 43(7), 1583-1604
- xix. Mbah, L.A.K. (2009). The Influence of Season and Age of Stand on The Nutritive Value of Elephant Grass (*Pennisetum purpureum*) and Sugar Cane (*Saccharium officinarum*) fed to the Canerat (*Thryonomys swinderianus*), M.Sc. Dissertation, University of Ibadan, Nigeria.
- xx. Maslow, A. H. (1987). *Motivation and Personality*. 3rd ed. New York: Harper & Row.
- xxi. Matlay, H and Westhead, P. (2005). 'Virtual Teams and the Rise of E-entrepreneurship in Europe.' *International Small Business Journal*, 23(3): 279-300.

- xxii. Miller, D. and Friensen, P. (2004). *Organizations: A quantum view*. Englewood cliffs, NJ: Prentice-Hall.
- xxiii. Naldi, L., Nordqvist, M., Sjöberg, K. and Wiklund, J. (2007). Entrepreneurial Orientation, Risk-Taking, and Performance in Family Firms. *Family Business Review*, 20(1), 33-47. <https://doi.org/10.1111/j.1741-6248.2007.00082.x>
- xxiv. Nigerian Investment Promotion Commission (2003). *Overview of Small-Scale Enterprises in Nigeria*. An information booklet: 1-33
- xxv. Okai, E. K. (2019), Big Opportunities for Pig Farmers in West Africa: Research and Innovation 2019. <https://www.thepigsite.com/articles/big-opportunities-for-pig-farmers-in-west-africa>, Retrieved 13<sup>th</sup> June, 2022
- xxvi. Osemwegie, O.O., Okhuoya, J.A and Dania T.A. (2016). Mushrooms and Woodlands: Ecological nexus. In: *Plantations: Biodiversity, Carbon sequestration and Restoration*. Hai Ren (eds). Nova Science Publishers, Inc., New York. pp 15 – 32.
- xxvii. Panzano, P. C. and Billings, R. S. (2005). 'An organizational level test of a partially mediated model of risky decision-making behavior', Available from <Http://www.dssincorporated.com/Research/RiskyDecision>. (Retrieved December 12, 2021).
- xxviii. Schumpeter, J. (1934). *The Theory of Economic Development*. Cambridge, Mass: Harvard University Press
- xxix. Schumpeter, J.A. (1942). *Capitalism, Socialism and Democracy*, London: Allen and Unwin.
- xxx. Schumpeter, J. (2002). 'Entrepreneurial profit', In Krueger, N. F. (ed), *Entrepreneurship: critical perspectives on business and management*. London: Routledge.
- xxxi. Shalley, C. E. and Gilson, L. L. (2004). What leaders need to know: A review of social and contextual factors that can foster or hinder creativity. *The leadership quarterly* 15 (1), 33 – 53. <http://dx.doi.org/10.1016/j.leaqua.2003.12.004>
- xxxii. Timmons, J. (2019). *New venture creation: Entrepreneurship for 21<sup>st</sup> Century*: McGraw-Hill. New York
- Wiklund, J. and Shepherd, D. (2003). Knowledge-based resources, entrepreneurial orientation, and the performance of small and medium-sized businesses. *Strategic Management Journal*, 24(13): 1307-1314. <https://doi.org/10.1002/smj.360>