

## GREEN ENTREPRENEURSHIP AND THE PERFORMANCE OF MICRO SMALL AND MEDIUM ENTERPRISES IN KOGI STATE, NIGERIA

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### ABSTRACT

*The main objective of this study is to investigate Green Entrepreneurship and the Performance of Micro Small and Medium Enterprises in Kogi State, Nigeria. Other specific objectives are to examine whether green entrepreneurial innovation, inclination and marketing impacts SMEs performance in Kogi State, Nigeria. The population of the study consist of 22,715 owners of SMEs in Kogi State, Nigeria (SMEDAN,2020). The sample size was 393 which was determined with the aid of Taro Yamani sampling technique. The hypotheses of the study was tested using multiple regression analysis with the help of SPSS 22.0. The study found that green entrepreneurial innovation has positive (19.203) and significant (0.000) impact on SMEs performance in Kogi State, Nigeria, green entrepreneurial inclination has positive (16.553) and significant (0.000) impact on SMEs performance in Kogi State, Nigeria while green entrepreneurial marketing has positive (7.641) and significant (0.000) impact on SMEs performance in Kogi State, Nigeria. The study concluded that green entrepreneurship impact SMEs performance in Kogi State, Nigeria. Based on the findings and conclusion, the study recommended that SME owners and managers should be encouraged to invest in environmentally friendly technologies, eco-efficient production processes, and sustainable product development. Capacity-building programs and sensitization workshops should be organized for SMEs to instill pro-environmental values and entrepreneurial orientation among SME operators. SMEs should be guided to adopt sustainable marketing strategies such as eco-labeling, environmentally responsible branding, and green promotion campaigns.*

**Keywords:** Green Entrepreneurship, SMEs Performance, Innovation, Inclination, Marketing and Customer Patronage.

### INTRODUCTION

A paradigm shift in the global business environment is taking place, and sustainability is an ingredient that can no longer be negotiable in achieving the success of the entrepreneurship. With climate change, environmental degradation and the depletion of resources taking its toll, businesses the world over are experiencing the heat to integrate sustainability into the very core of their business models. This has seen the emergence of green entrepreneurship which is a paradigm that incorporates environmental concerns in economic and social values generation (Rasheed, 2024). Green entrepreneurship is a new business operation that does not only pursue profitability, but also reduces the environmental impact and encourages sustainable business development (Muangmee, 2021).

Green entrepreneurial innovation involves the use of products, processes or technologies that avoid environmentally damaging ecological harms and at the same time bring in economic gain. Asian and European research indicates that green innovation may lead to efficient operations, new markets, and increased competitive advantage of a company (Appiah, 2025). In the case of SMEs, these types of innovations including waste-to-value production up to energy-efficient technologies are often cost-saving in the long term. On the same note, green entrepreneurial inclination identifies attitudinal and behavioural orientations of entrepreneurs to business activities that are environmentally

conscious. Literature suggests that companies whose leaders possess a high level of environmental values tend to incorporate sustainability into their policies and, therefore, increase resiliency and reputation (Asad, 2024). Green entrepreneurial marketing, however, is marketing products and services in a strategic manner depending on their environmental characteristics. There is some evidence suggesting that green marketing does not only draw customers conscious of the environment but also enhances brand loyalty and brand differentiation, which becomes more competitive (Al-Shaikh, 2023).

The green entrepreneurship argument has a solid standing in the world literature. According to proponents of the concept, by integrating sustainability into entrepreneurship, there will be a win-win outcome: lowering the operational expenses, improving brand image, and making sure that the business is viable in the long-term in markets that are slowly turning into green-conscious (Muangmee, 2021). Evidence of the emerging markets indicates that companies that have adopted green innovation have better financial results and increased access to the environmentally conscious consumers (Appiah, 2025). Moreover, the presence of green financing schemes that are getting more and more dependent on the environmental performance gives another incentive to SMEs to adopt green practices (Asad, 2024).

But this optimism is checked up by the counterarguments and empirical contradictions. Those who criticize the adoption of green innovations argue that this can involve significant initial technological and skill investments, which many SMEs will simply not be able to swallow (Rasheed, 2024). The financial payoff of green marketing is mostly a gamble in a context where the regulatory agency is weak and the demand of the consumer on the green product is low (IIARD, 2024). Moreover, the intensive use of the so-called greenwashing according to which companies inflate their environmental statements, in addition, undermines customer confidence and may weaken the competitive position of truly green entrepreneurs (Rasheed, 2024). Other studies indicate that although green entrepreneurial inclination is positively linked to sustainability adoption, it is not necessarily getting food on the table in terms of quantifiable changes in the performance of a firm, especially where resources are limited (Sharma, 2025).

Waste management issues, air and water pollution and climate change impacts are some of the urgent environmental problems that Nigeria has to address with innovative and viable solutions. Recent research evidence suggests that the operational performance of Nigerian SMEs that embrace green practices, including environmentally friendly production processes and waste-to-resource practices, tends to improve and be more widely accepted (Achaku et al., 2022). The implementation of green marketing in Nigeria has also been indicated to have niche markets especially in urban centres where consumers are increasingly becoming aware about sustainability (IIARD, 2024).

However, the issues of green entrepreneurship adoption in Nigeria are complex. One of the most important obstacles is financing since SMEs tend to be denied access to cheap credit when it comes to financing green innovation and green technology (Achaku et al., 2022). The human capital constraint also impedes the ability of the SMEs to adopt sustainable practices since the technical knowledge and managerial skills are not evenly distributed. In addition, poor institutional structures, such as lack of trusted certification and labelling infrastructure, take the floor out of the credibility of green marketing approaches. There are also consumer-associated obstacles since most consumers in Nigeria due to their low income are hesitant or incapable of paying a higher cost on green products (IIARD, 2024).

Regarding research, there is much gap in the current discourse. Most of the empirical studies in Nigeria have concentrated on general sustainability practices without narrowing down on the particular impacts of green entrepreneurial innovation, inclination, and marketing on the performance of SMEs in Kogi State, Nigeria.

In achieving the objectives of this study, the following questions are formulated to be answered by this study.

- i. To what extent does green entrepreneurial innovation impact SMEs performance in Kogi State, Nigeria?
- ii. To what extent does green entrepreneurial inclination impact SMEs performance in Kogi State, Nigeria?
- iii. To what extent does green entrepreneurial marketing impact SMEs performance in Kogi State, Nigeria?

The broad objective of this study is to investigate Green Entrepreneurship and the Performance of Micro Small and Medium Enterprises in Kogi State, Nigeria.

. The Specific objectives include:

- i. To evaluate whether green entrepreneurial innovation has significant impact on SMEs performance in Kogi State, Nigeria.
- ii. To examine whether green entrepreneurial inclination has significant impact on SMEs performance in Kogi State, Nigeria.
- iii. To x-ray whether green entrepreneurial marketing has significant impact on SMEs performance in Kogi State, Nigeria

To address the research questions intended for this study, the following hypotheses was formulated and tested in null form;

**H<sub>01</sub>:** Green entrepreneurial innovation does not have significant impact on SMEs performance in Kogi State, Nigeria.

**H<sub>02</sub>:** Green entrepreneurial inclination does not have significant impact on SMEs performance in Kogi State, Nigeria.

**H<sub>03</sub>:** Green entrepreneurial marketing does not have significant impact on SMEs performance in Kogi State, Nigeria.

## REVIEW OF RELATED LITERATURE

### Conceptual Review

#### Concept of Green Entrepreneurship

Muangmee (2021) explains green entrepreneurship as the activity of emerging businesses, which not only generate sustainable economic value but also alleviate the burden on the planet. Similarly, Gast and others (2017) perceive it as a type of entrepreneurial activity that fulfills two functions at once, namely: both mitigating acute ecological issues and, at the same time, transforming them into a competitive edge. To expand on this, Asad (2024) postulates that green entrepreneurship entails active leadership and creative activities that integrate environmental agendas into the mainstream business approaches that consequently make firms compliant with international sustainable development demands. Although these views are presented in various directions, there is one thing through which these all intersect, and that is the fact that green entrepreneurship does not follow the usual ways of profit making practices since ecological stewardship is at the core of business.

To discuss the topic, the definition of green entrepreneurship by Muangmee (2021) was adopted, according to which green entrepreneurship is viewed as business projects that strive to minimize the ecological impact, but at the same time, make a profit. Such definition especially applies given that this definition embodies the crucial dualism of environmental responsibility and economic viability.

### **Concept of SMEs Performance**

Following Ahmad and colleagues (2019), SME performance can be defined as the performance of small and medium-sized enterprises in achieving its targets with respect to efficiency, but according to the authors, the success of a firm is determined by its internal capabilities as well as the environment and technological changes that it operates in. Building upon the definition, Akinwale et al. (2023) define SME performance in terms of whether small firms succeed in their goals by creating a competitive advantage due to financial stability, market expansion, and being able to adapt to the environment and technological changes.

To find the definition used in this study, the definition proposed by Ahmad et al. (2019) is used, where SME performance is viewed as the level to which companies fulfill their business goals, considering the bottom line and their status at the marketplace. This definition is especially suitable because it balances hard figures of financial outcomes and the strategic foundation of competitiveness in the market. This is a two-sided method that gives it a fitting lens in studying how green entrepreneurial innovation, inclination, and marketing affect the fortunes of SMEs.

### **Concept of Revenue Growth**

Penrose (1959) suggests that revenue growth is the natural extension of productive opportunities of the firm as it gets to know how to make the most of the resources and capabilities it has and thus, entrenches the concept of growth into the larger theory of the firm. In much more recent times, Davidsson and his partners (2009) defined revenue growth fairly straight-forward as the percentage change in the sales turnover within a certain time frame which is used to measure the ability of a firm to increase its presence in a market and to make the cash coffers ring louder. Similarly McKelvie and Wiklund (2010) define revenue growth as a vibrant indicator of organization success- one that does not only indicate the willingness of the market to accept the products of a particular organization but also how the management can capture the day. In the current-day view, e.g., by Akinwale et al. (2023), the increase of revenues is a two-sided coin, as it is not only an important financial indicator but also a strategic product, where the ability to innovate, the strength of marketing, and the capacity to survive in the shifting environment play a key role among SMEs.

In order to carry out this research, the definition, offered by Davidsson et al. (2009), is used, which views the growth of revenue as a percentage change in the sales turnover with time. This definition is best aligned with the fact that it gives a clear and measurable and objective measure of performance, yet also flexible to encompass the dynamic and unpredictable nature of the SME environment.

### **Green Entrepreneurial Innovation**

According to Schiederig et al, the definition of green innovation would entail the creation of new products and processes that reduce the environmental impact of the firm through increased efficiency, reduced waste, or conserved resources (2012). Equally, Chen et al. (2018) define it as innovation tasks focused on killing two birds with one stone: producing

a real ecological betterment and at the same time refining a competitive advantage of a business, thus having the business development aligned with the ecological guardianship. In their article, Muangmee (2021) frames green entrepreneurial innovation as an activity of integrating friendly practices and technologies into the core of entrepreneurial activities, which is associated with enhancing the bottom line of the firm and its environmental performance. Going an extra step, Xie et al. (2019) say that green innovation does not imply only technological improvements, but also the organizational transformation that would entail the direct integration of the sustainability values into the business model.

To conduct the analysis, the definition provided by Chen et al. (2018) is used; that is, the green entrepreneurial innovation can be described as the innovation activities aimed at explicitly producing ecological benefits and creating a superior competitive advantage. This definition is especially appropriate because it reflects the dualism character of contemporary sustainable business.

### **Green Entrepreneurial Inclination.**

Kautonen and colleagues (2015) also define entrepreneurial inclination in a broad way, as a personal tendency or readiness to plunge into the world of entrepreneurship an inclination which, in the case of green entrepreneurship, is specifically applied to the activities that generate environmental value. In the same vein, Dutta et al. (2020) identify green entrepreneurial inclination as the innate preference of an entrepreneur to establish business ventures to address ecological issues directly and at the same time make a profit. On the same note, Muangmee et al. (2021) claim that a green inclination is an attitudinal and behavioral commitment of an entrepreneur to sustainable practices in a careful balance between profitability and care towards the planet. More recently, Singh and Gupta (2023) conceptualize it as the psychological motivation that compels business people to take up opportunities that are environmentally friendly.

To conduct this research, the definition of Dutta et al. (2020) is selected, according to which the concept of green entrepreneurial inclination is considered as the inclination of entrepreneurs to start a business focused on solving ecological issues and at the same time brings economic benefits. This definition strikes the nail on the head, as it is a perfect definition of the concept in that it represents both the motivation to save the environment and the need to operate a thriving business.

### **Green Entrepreneurial Marketing**

Papadas and others (2019) contend that green marketing is an all-encompassing process, which involves strategic, tactical, and internal activities that integrate the value of the environment into the fibre of all marketing decisions, thus making them well-equipped to sail the tide of the increased environmental issues. On the same note, Leonis and Skarmeas (2017) define it as the incorporation of environmental sensitivity in every element of the marketing mix, which includes product design and price, distribution, and advertising, a move that eventually rewards in terms of improved reputation of the firm and customer loyalty.

On this basis, Hossain et al. (2022) develop green entrepreneurial marketing, which is presented as the dynamic process of the creation, communication, and offering of value to the environment by the entrepreneurs in a manner that does not neglect the bottom line employed by the firm in order to create such innovations.

In the context of this analysis, the definition of Hossain et al. (2022) is applied, according to which the process of building, communicating, and delivering value with the help of environmentally responsible innovations and maintaining profitability is the meaning of green entrepreneurial marketing. This definition is especially suitable because it describes the active and value-oriented essence of entrepreneurial marketing and balances the two objectives of the planetary and commercial success ideally.

## **Theoretical Framework**

### **Green Innovation Theory**

The Green Innovation Theory is connected to the larger history of innovation research spearheaded by Joseph Schumpeter, who at the beginning of the 20<sup>th</sup> century recognized innovation as the literal force of entrepreneurial activity and economic growth (Schumpeter, 1934). Nonetheless, the particular model of Green Innovation Theory started to take shape in the late 1990s and early 2000s, as an increasing number of scholars and policymakers began to make the links between the concepts of ecological responsibility and innovation-based competitiveness. Primarily, Porter and van der Linde (1995) were the first to establish such a basis by making the infamous argument that environmental regulations well designed do not necessarily spell disaster to business, but, in fact, may generate innovations that may enhance environmental and economic performance what is now commonly referred to, as the Porter Hypothesis. Drawing upon this, Green Innovation Theory is a formalization of the opinion that innovation is not only a source of competitive advantage but it is also an effective means of decreasing our ecological footprint by creating eco-friendly products, processes, business models.

The theory is based on the fundamental premise that a company can use environmental problems as the raw material to create clever solutions that would provide a twofold benefit of environmental sustainability and money (Xie et al., 2019). In this view, environmental responsibility is no longer seen as a constrainer but as a source of opportunities meaning that companies that actively embrace green innovations tend to achieve a greater chance to attain their long-term competitive advantage. Also, the theory presupposes that the phenomenon of green innovation is a complex task, including not only technological improvements such as clean technologies, but also process innovations that help to reduce waste and organizational innovations, which result in the creation of new sustainable business practices (Chen et al., 2018).

In the case of SMEs, this will mean a strategy path. Through green entrepreneurial innovation that may be in terms of launching green products, using green processes, or taking up green marketing, the small and medium enterprise would be killing two birds with one stone. They are positioned to improve their performance in the market, reputation of their brand and have high cost efficiencies as a result of their optimization of resource utilization (Dangelico & Vocalelli, 2017).

### **Adoption of Theory**

This paper is based on Green Innovation Theory. According to the theory, environmental problems are not in fact inhibiting to business, and thus they can be a potent source of innovation enabling companies to be both ecologically sustainable and economically competitive. This core principle is very well connected to the current study, which is centered around the ideas of green entrepreneurial innovation, inclination, and marketing since the three mentioned

aspects are the most ideal manifestation of the proactive practices that SMEs could use to help in reducing their environmental footprint and enhance their performance.

Moreover, the theory of Green Innovation is based on the premise that the adoption of environmentally friendly practices is not a zero-sum game. It results in the vicious cycle of enhanced resource efficiencies, reduced operation expenses, increased customer loyalty, and enhanced competitive strength. Such possible advantages are not just beneficial, but they are essential to the survival and development of SMEs that have to work in the challenging and unstable business environment of Nigeria.

### **Empirical Review**

Al Shammre et al. (2023) investigated the role of green entrepreneurial motivation in influencing green innovation and green environmental performance of Saudi Arabian small firms. The study collected primary data in 2022 in the form of cross-section and its design was quantitative survey research. The sample consisted of small enterprises in Saudi Arabia and the research was involving 284 respondents in small enterprises of different sectors. Data analysis proceeded by use of Partial Least Squares Structural Equation Modelling (PLS-SEM) which was used to test both direct and mediating relationships along with moderating relationships. The study was found to be positive and significant in terms of entrepreneurial motivation green influencing green innovation and also found that green innovation influenced the environmental performance positively and significantly and that the motivation environmental performance was partially mediated by green innovation and that knowledge sharing supported the motivation innovation relationship. The research discerned that intrinsic and extrinsic motivation of green kind by the small enterprise owners/managers drives innovation towards increased environmental performance. It was the recommendation of the study that the policymakers and enterprise support programmes must encourage green motivation (through training, awareness and knowledge share programme) and must create enabling incentives in order to develop green innovation in small firms.

In the paper by Mankgele, (2023) the researchers examined the relationship between the green entrepreneurial self-efficacy and environmental performance of SMEs in the South African province of Gauteng. The study adopted a quantitative cross-sectional design and secondary data will be obtained with the use of self-administered questionnaires of a purposive sample of 195 SMEs that operate in the Gauteng province. Variables were analysed by use of structural equation modelling. The analysis determined the presence of a significant positive correlation between the entrepreneurial self-efficacy in green and innovation, the green innovation with environmental performance; the green innovation in the betweenness of the self-efficacy and environmental performance, and green purchase behaviour in the betweenness. The research concluded that the belief of the entrepreneurs in their capacity to undertake green activities is important in the formation of green innovations that enhances environmental performance of SMEs. Recommended policies and firm-level practices that would be suggested by the study to the enhancement of GESE (training, mentoring, access to green networks), promoting consumer green purchase behaviour, and making the diffusion of innovation more accessible to SMEs were suggested.

Achaku et al. (2022) discussed the effects of green entrepreneurship on the performance of SMEs in North-Central Nigeria (including the population of SMEs in Benue, FCT-Abuja, Kogi, Kwara, Plateau, Nassarawa, and Niger). The study design was a pre-tested and cross-sectional survey design (population frame derived by using the NBS/SMEDAN; sample size was 1,233 SMEs sampled by using proportional stratified sampling of the seven

jurisdictions). Data analysis was done in terms of descriptive statistics and inferential statistics by simple linear regression (SPSS). The findings indicated that the effects of green entrepreneurial innovative production on competitive advantage were high and the effect of the green entrepreneurial inclination was positive and highly significant on customer patronage implying that the models were effective in explaining their effects. It had been concluded in the study that green entrepreneurship significantly impacts the performance of SMEs in the Nigerian. The research suggested policy and management interventions to promote green production, establish green entrepreneurial consciousness and application of using capacity building and incentives to promote green practices to SMEs.

Setyawati et al. (2020) examined how the green marketing strategy affected the performance of the firms in the Indonesian SMEs and examined the mediating role of religiosity. In the study, the current SME operations (data collected in 2019/2020) were tackled, and the research design was the cross-sectional survey. The sample was a population of SME owner managers of the Muslim SMEs in Indonesia and the study utilized convenience sampling to obtain 235 responses which could be used by the questionnaires self-administered. The study and the measurement were expected to be made on the basis of the primary data and the relationships were estimated with the assistance of the Partial Least Squares Structural Equation Modeling (SmartPLS). The findings revealed that, green product, green price and green promotion were significant and positive in terms of their effects on the firm performance, and that green distribution had no significance; religiosity supported a series of these relationships. The research has discovered that green marketing has strategic dimensions that boost the performance of the SMEs in the Indonesian. The research suggested the application of green products and green price by the SME managers and efficient communication of the environmental credentials, but the policy makers should promote the values and platforms that contribute to the richness of the pro-environmental consumer behaviour and allow green distribution system of SMEs.

Xie et al. (2019) investigated the influence of green process and product inclination on the corporate financial performance by using a content-analysis approach on 209 manufacturing industry listed companies of the heavy pollution in China. The research study sampled the publicly available annual reports and sustainability disclosures. The content analysis that the researchers applied to create the variables and continue the tests (mediation and moderation analysis) was grounded on regression. The research discovered that green inclination positively influenced the innovation of green products and green process and green product innovation also positively influenced improved financial performance. The study results were that the development of green technology can offer ecological and economic payoffs. The analysis suggested that the management must assume the initiative of investing in innovations in the processes which can be transformed into green products that can attract the market and developing credible images of green so that the financial returns can be accessed.

Papadas et al. (2019) studied the impact of both strategic and internal green marketing orientation on the competitive advantage and financial performance of the Greek market. The study was founded on firms in five clusters of industries. The study involved cross-sectional survey research design. The study employed a commercial database of 1,596 firms which was the sampling frame; a stratified sample of 700 firms was taken; the questionnaires were mailed to CEOs, marketing managers or sustainability/CSR managers and completed through a web survey of 700 invitations 263 returns received and after the elimination of the non-completed questionnaires 226 usable questionnaires were obtained. It collected mono method data, where the application of structured questionnaire collected data and was quantified using confirmatory factor analysis and structural equation modelling (AMOS 23); moderated mediation was tested using PROCESS (Model 7). The research found out that strategic green marketing orientation has a positive

and significant linkage with competitive advantage, competitive advantage mediated the SGMO - financial performance linkage and internal green marketing orientation (IGMO) mediated the SGMO -competitive advantage linkage. The research concluded that broad based and combined green marketing strategy and internal dispersion of environmental values provided sustained competitive advantage and improved financial performance. The research proposed that the managers ought to invest long term in the strategic green marketing, combine CSR and stakeholder involvement with the strategy and form internal green culture through training and incentive provision.

**METHODOLOGY**

A survey research design was applied in this research. According to Creswell (2014), the survey research design is a quantitative research process in which the researchers post or administer a survey to a sample or the entire population of the people to elucidate the attitudes and opinions, behaviors or the nature of the population.

The sample of the study include 22,715 owners of SMEs in the Kogi State as taken out of the SMEDAN report of 2020. This study used Purposive/Judgmental Sampling technique since it enables the researcher to sample different owners of SMEs in Kogi State. The sample size of 393 was calculated by using Taro Yamani formula. They used 5-point Likert-scale questionnaire that contained the possible responses with a value ranging between 1 strongly agree, 2 agree, 3 undecided, 4 disagree, and 5 strongly disagree.

The data analysis was performed using SPSS version 22.0, by multiple regression, which approximated the model and tested the null hypotheses of the research. The data that met the objectives of the research was then coded into SPSS version 22.0 statistical computer program.

**Model Specification**

The dependent variable is SMEs Performance (SMEP), while the independent variables includes Green Entrepreneurial Innovation (GEI), Green Entrepreneurial Inclination (GEIN) and Green Entrepreneurial Marketing (GEM). To achieve all the hypotheses of this study, multiple regression was employed to estimate the model. The model is presented thus:

$$SMEP = f(GEI, GEIN, GEM)$$

$$SMEP_i = \beta_0 + \beta_1 GEI_i + \beta_2 GEIN_i + \beta_3 GEM_i + \mu_i \text{-----} (1)$$

Where: SMEP = Small and Medium Enterprises Performance (Dependent Variable);

$\beta_0$  = a constant and  $\beta_{1-3}$  =

GEI= Green Entrepreneurial Innovation (Independent Variable)

GEIN= Green Entrepreneurial Inclination (Independent Variable)

GEM= Green Entrepreneurial Marketing (Independent Variable)

$\mu$  = Stochastic error term;

*i* = Cross sectional; and

*f* = Functional relationship

**DATA ANALYSIS AND DISCUSSION OF FINDINGS**

The study distributed three hundred and ninety-three (393) questionnaires to SMEs owners in Kogi State, Nigeria. Out of which, three hundred and twenty-four (324) completed questionnaires were properly filled and returned, representing a (82.44%) response rate, while sixty-nine (69) questionnaires representing (17.56%) were not returned. The subsequent analysis and conclusions were drawn based on the three hundred and twenty-four (324) valid responses received.

**Cronbach’s Alpha Reliability Test**

The Cronbach’s Alpha test showed a satisfactory result on each of the study variables as presented below.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.806	20

Source: SPSS 22.0 Version

**Model Summary**

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.935 <sup>a</sup>	.874	.873	.29076

a. Predictors: (Constant), GEI, GEIN, GEM

The R-SQ of 0.874 in the model summary table above indicated that the effects of components of independent variable which entails have a cumulative effect of (87.4%) on the dependent variable and the adjusted R-SQ of 0.873 indicated

the accurate effect of the cumulative influence of Green Entrepreneurial innovation, Green entrepreneurial inclination and Green entrepreneurial marketing (87.4% Variables in this model failed to capture the remaining (12.7%) proportion.

**ANOVA Result**

<b>ANOVA<sup>b</sup></b>						
<b>Model</b>		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	163.750	3	54.583	645.659	.000 <sup>a</sup>
	Residual	23.586	279	.085		
	Total	187.337	282			

**a. Predictors: (Constant), GEI, GEIN, GEM**

**b. Dependent Variable: SMEP**

The significant level of 0.000 in the anova result table above and the F-Statistics value of 645.659 indicates that the model is good, fit as well as significant at the 5 percent level. This shows that the result is good and is applicable in making decisions.

**Test of Hypotheses**

<b>Coefficients<sup>a</sup></b>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.033	.053		.611	.002
	GEI	.616	.032	.644	19.203	.000
	GEIN	.767	.046	.769	16.553	.000
	GEM	.333	.044	.412	7.641	.000

**a. Dependent Variable: SMEP**

The coefficients table in the table above was used as the main estimation technique to analyze the hypotheses of this study.

### **Test of Hypothesis One**

H<sub>01</sub>: Green entrepreneurial innovation does not have significant impact on SMEs performance in Kogi State, Nigeria.

As seen in the figure above, the t-statistic of 19.203 and the corresponding sig. level of 0.000 are significant at the level of 5% level of significance indicates the performance of SMEs in Kogi State, Nigeria is positively and significantly influenced by the green entrepreneurial innovation. The null hypothesis one which said that the green entrepreneurial innovation had no significant impact on the performance of SMEs in Kogi State, Nigeria, was rejected and the alternate which said that the green entrepreneurial innovation had a significant impact upon the performance of SMEs in Kogi State, Nigeria, was accepted.

### **Test of Hypothesis Two**

H<sub>02</sub>: Green entrepreneurial inclination does not have significant impact on small and medium enterprises performance in Kogi State, Nigeria.

Also, the table above indicates that the value of the t-statistic of 16.553 and the corresponding level of significance of .000 are significant at the 5% level of significance and thus, the outcome shows that green entrepreneurial inclination has a positive and significant influence on the performance of SMEs in Kogi State, Nigeria. Basing on this, the null hypothesis two, which stated that the green entrepreneurial inclination does not greatly influence the performance of SMEs in Kogi State, Nigeria, was rejected and the alternative one, that the green entrepreneurial inclination has a significant impact on the performance of SMEs in Kogi State, Nigeria, was accepted.

H<sub>03</sub>: Green entrepreneurial marketing does not have significant impact on small and medium enterprises performance in Kogi State, Nigeria.

Besides it, the above table shows that t-statistic of 7.641 and an associated sig. level of .000, which is significant at 5-percent level of significance, is the outcome that means that green entrepreneurial marketing has a positive and significant effect on the performance of SMEs in Kogi State, Nigeria. On this basis the null hypothesis three that state that green entrepreneurial marketing does not have any substantial impact on the performance of SMEs in Kogi State, Nigeria, was rejected and the alternate hypothesis that state that green entrepreneurial marketing has substantial impact on the performance of SMEs in Kogi State, Nigeria, was accepted.

### **Discussion of Findings**

This research established that, green entrepreneurial innovation positively and significantly influences the performance of SMEs in Kogi State, Nigeria. SMEs are becoming highly competitive and dynamic and through innovation, innovation becomes an essential force behind growth and survival. Here, the capacity of SMEs to adopt and use green entrepreneurial innovation is not only relevant but also required in achieving sustainability in the long-term and better performance. Green entrepreneurial innovation offers SMEs a chance to investigate and implement a variety of environmentally pleasant products, processes and services that meet the global requirements of ecological accountability and at the same time identify additional channels of competitive edge. In particular, SMEs which are proactive in their environmentally responsible approaches will have higher chances to create distinctive product lines,

lower the costs of production due to the use of energy, and build their brand reputation within the circles of the environmentally conscious customer groups. This results align with the results of Al Shammre et al. (2023).

This research established that the inclination of the green entrepreneurship positively and significantly influences the performance of the SMEs in the Kogi State, Nigeria. Green entrepreneurial inclination is an important aspect of entrepreneur behavior that shows the willingness, commitment and proactive spirit of SMEs in adopting environmentally friendly practices. It goes further than just how green products and services are adopted but incorporates the entrepreneurial orientation and values that guide the firms to ensure that the strategies in their business are aligned with the values of green entrepreneurship. This tendency predisposes the opportunities of SMEs in the sustainability arena, determining their choices to invest in environment-friendly innovations, re-organize their business in the context of environmentally-oriented operations, and position themselves in the market, which is becoming more environmentally-responsible. This means that SMEs that have their owners and managers with a higher degree of environmental awareness and proactive attitude towards sustainability have a higher chance of having better results in regards to profitability, customer retention, competitiveness as well as market growth. It is also consistent with the results of Xie et al. (2019).

In this paper, it was revealed that green entrepreneurial marketing positively and significantly influences the performance of the SMEs in the Kogi State in Nigeria. To be in business is not enough but it is the capacity of the SMEs to appreciate, identify and serve their target markets in the most effective way. The modern business world has become highly competitive and environmental oriented and hence SMEs should do more than just using the traditional marketing strategies but must implement strategies that portray their dedication to sustainability. Green entrepreneurial marketing offers such a channel as it helps SMEs to establish their market segment, share the eco-friendly value of their products and services, and position them strategically to appeal to, and keep their customers who are becoming more and more interested in environmental responsibility. By undertaking green marketing activities, the SMEs do not only market their products and services, but they also create trust, loyalty, and distinction in the markets where consumers require quality and environmentally aware products and services. Through good communication of their green values, such enterprises can attract environment-sensitive consumers, boost brand image, and earn a unique competitive edge in the market. This result is in agreement with those of Setyawati et al. (2020).

## CONCLUSION AND RECOMMENDATIONS

The study concludes that green entrepreneurship that is manifested in the form of innovation, inclination, and marketing is an effective force behind the performance of SMEs in Kogi State, Nigeria. It has been demonstrated that the more sustainable innovation, proactive green attitude, and strategic marketing of eco-friendly products and services the more sustainable and competitive, customer-friendly, and continuous growth of SMEs. The results lead to the conclusion that environmental responsibility and business success are not conflicting objectives, but complementary roads.

The research thus found that the green entrepreneurship influenced the performance of SMEs in Kogi state in Nigeria.

The following recommendations were made from the findings:

- i. SME owners and managers should be encouraged to invest in environmentally friendly technologies, eco-efficient production processes, and sustainable product development.
- ii. Capacity-building programs and sensitization workshops should be organized for SMEs to instill pro-environmental values and entrepreneurial orientation among SME operators.

- iii. SMEs should be guided to adopt sustainable marketing strategies such as eco-labeling, environmentally responsible branding, and green promotion campaigns.

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