

# Green Entrepreneurship and Employment Generation in Ikwerre Local Government Area of Rivers State

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DOI: <https://doi.org/10.51244/IJRSI.2026.1304000004>

Received: 25 March 2026; Accepted: 30 March 2026; Published: 23 April 2026

## ABSTRACT

This study investigated Green Entrepreneurship and Employment Generation in Ikwerre Local Government Area of Rivers State. The aim and objectives of the study is to examine the impact Green Entrepreneurship and Employment Generation in Ikwerre Local Government Area (LGA) of Rivers State. Based on the study specific objectives, three research questions were raised and one hypothesis was formulated. The study adopted the survey research design; a sample size 200 respondents were drawn from the target population of 316 green entrepreneurs using the systematic sampling technique. The instrument for data collection was a self-constructed structured questionnaire which had been validated and subjected to Cronbach alpha reliability indexes of .859 and .782. The data collection was done after administration and retrieval of questionnaires with the help of trained research assistants. Out of the 200 questionnaires administered, 164 questionnaires were retrieved and used for analysis. The analysis of data was done using descriptive and inferential statistics with the aid of IBM Statistical Package for Social Science version 26.0. The results indicated that most of the identified green entrepreneurship ventures exist in Ikwerre LGA, are Waste recycling, organic farming, renewable energy businesses and eco-friendly packaging products; also indicates that green entrepreneurship significantly contributes to employment generation in Ikwerre LGA. The study concluded that green entrepreneurship ventures are present and there is a significant relationship between green entrepreneurship and employment generation in Ikwerre Local Government Area of Rivers State, particularly in waste recycling, organic farming, renewable energy and eco-friendly packaging; and it significantly contributes to employment generation in the area. It was recommended that government and private investors should encourage investment in eco-friendly transport systems such as electric bikes and fuel-efficient vehicles through incentives and awareness campaigns; the government and NGOs should provide targeted training, soft loans and startup support to further increase youth and women employment in green enterprises and should also organize regular workshops and skill acquisition programmes to improve technical knowledge in renewable energy, waste management and sustainable agriculture .

**Keywords:** Green Entrepreneurship, Sustainable Entrepreneurship, Environmental Sustainability, Employment Generation, Ikwerre Local Government Area

## INTRODUCTION

Entrepreneurship plays a vital role in economic growth and development by fostering innovation, creating job opportunities, and driving wealth creation. In Rivers State, where unemployment rates remain a significant challenge, entrepreneurship development has emerged as a critical tool for employment generation. Small and medium-sized enterprises (SMEs) contribute significantly to the economy by absorbing a large segment of the unemployed population, particularly youths and graduates (Mohammed, 2020). However, despite the potential benefits of entrepreneurship, many aspiring entrepreneurs in rivers face challenges such as inadequate funding, lack of business knowledge, and poor infrastructural support. The presence of various government and private-

sector initiatives aimed at promoting entrepreneurship in Ikwerre Local Government has provided opportunities for business development (Nwachukwu, 2021). Programmes such as the Katsina State Youth Agricultural Entrepreneurs Programme (YAGEP) and Skills Training and Entrepreneurship Programme (STEP) have empowered many young individuals with skills and startup capital to establish their own businesses.

The term green entrepreneurship is relatively new in the field of academic research. It is also referred to as environmental entrepreneurship or eco-preneurship or eco-entrepreneurship. According to Fiche (2021), the concept of green entrepreneurship originated at the end of the 20th century, when awareness of environmental problems began to gain momentum. The concern with global warming, pollution and the scarcity of resources led to a search for innovative solutions that could reconcile economic growth with environmental preservation (Fiche, 2021). Green entrepreneurship refers to a special subset of entrepreneurship that aims at creating and implementing solutions to environmental problems and to promote social change so that the environment is not harmed. It has been suggested that green entrepreneurship may be a new business paradigm rather than a subset of entrepreneurship because more than just offering eco-friendly goods and services to a specialized market motivates green owners of enterprises (Entrepreneurs Data, 2025). It involves developing innovative products, services, and business models that minimize negative environmental impacts while contributing to social well-being. In other words, green entrepreneurship refers to businesses and companies developing products or services that are usable everywhere and have the potential to protect the ecosystem (Entrepreneurs Data, 2025). Therefore, the target of green entrepreneurship is to improve the business ecosystems where businesses operate and at the same time promote changes in business practices that have an impact on the natural environment and society (Gast et al., 2017). In the light of Fiche (2021), a well-established firm adopting cleaner production techniques or environmental management practices is considered to be engaging in green entrepreneurship.

Entrepreneurship Development According to Okafor (2022), entrepreneurship development refers to the process of equipping individuals with the necessary skills, knowledge, and resources to identify business opportunities, start, and manage successful enterprises. Okoro (2021) stated that it involves training, mentoring, and providing financial support to foster innovation and self-reliance. By nurturing entrepreneurial abilities, individuals can create jobs, stimulate economic growth, and reduce unemployment. Entrepreneurship development encompasses various aspects, such as capacity building, access to finance, market exposure, and legal support, all aimed at encouraging sustainable business practices. It plays a critical role in addressing economic challenges and enhancing the socio-economic well-being of communities (Nnadi, 2021). Impact of Entrepreneurship Development on Employment Creation in the words of Eze (2021).

Employment generation refers to the process by which an economy creates new job opportunities for its working-age population. It is a fundamental objective within Macroeconomics and Labor Market policy, as a robust and growing job market is essential for Economic Growth and societal well-being. This concept encompasses both the expansion of existing industries that lead to more hiring and the emergence of new sectors or businesses that contribute to the overall increase in available positions. According to Mohammed (2020), it requires examining the quality of jobs, the sectors in which they are appearing, and their impact on different segments of the workforce. A healthy employment generation trend is typically characterized by a sustained reduction in the unemployment rate and an increase in the labour force participation rate. Furthermore, it's important to consider whether new jobs provide decent wages, benefits and opportunities for career progression (Mohammed, 2020). Policymakers also evaluate whether employment generation is inclusive, benefiting diverse populations and regions, or if it exacerbates Economic Inequality.

This study is hinged on Human Capital Theory. The theory was proposed by economists Gary Becker and Theodore Schultz in the 1960s, with Becker's influential work *Human Capital* (1964) laying the foundation for its widespread application in economic thought. The theory posits that investments in human capital, such as education, skills development, training, and health, lead to increased productivity, which ultimately results in higher economic output and personal earnings. The fundamental idea is that individuals, much like physical capital, can be developed through education and training to become more productive, leading to enhanced economic performance for both individuals and society. The foundation of Human Capital Theory is rooted in the belief that human beings possess knowledge, skills, and abilities that are valuable economic resources. These can be cultivated through various forms of education, formal training, or experiential learning, which improve individuals' employability, entrepreneurial potential, and their ability to generate economic value. The theory

has been widely applied in labour economics and is particularly useful in explaining how education and training contribute to productivity, wage differentials, and job creation.

Relating this theory to the study on "entrepreneurship development and employment generation in Ikwerre Local Government Area of Rivers State State," it underscores the importance of equipping individuals, especially the youth, with entrepreneurial skills and knowledge to foster economic independence and reduce unemployment (Ibrahim, 2023). By focusing on enhancing human capital through entrepreneurship education and skill-building programs, the study aligns with the notion that investment in human capital is essential for creating self-sustaining businesses. These businesses, in turn, contribute to employment generation in Ikwerre Local Government Area of Rivers State. Therefore, Human Capital Theory provides a critical framework for understanding how green entrepreneur's development can empower individuals with the tools necessary to create jobs, drive economic growth, and tackle unemployment in Ikwerre Local Government Area.

Empirically, Umar (2023) investigated the challenges of entrepreneurship development in Kebbi State, focusing on the relationship between education, training, and business growth. The population comprised small-scale business owners, and a sample of 200 was selected using stratified sampling. Data was collected through interviews and questionnaires, with a reliability coefficient of 0.85. Descriptive statistics and correlation analysis were used. The study revealed that education and training positively impacted business growth, though entrepreneurs faced significant financial constraints. Umar recommended better funding and training programs. The present study differs by focusing on a broader range of entrepreneurial support mechanisms beyond education and training. Akinyemi (2022) explored the impact of government intervention on entrepreneurship development in Lagos State. The study targeted entrepreneurs in Lagos, with a sample size of 250 selected using simple random sampling. Data was collected through surveys, with a reliability coefficient of 0.82. Regression analysis was applied to assess the impact of government interventions on entrepreneurship growth and job creation. Akinyemi found that government intervention positively influenced entrepreneurship, though challenges like corruption and bureaucracy hindered effectiveness.

Wachucku et al. (2026) investigated the impact of mobile money and digital lending platforms on green entrepreneurship in Nigeria. Their aim and objectives of the study is to examine the impact of mobile money and digital lending platforms on the growth and development of green entrepreneurship in Nigeria. Their study was guided with a hypothesis formulated for testing the significance. The correlational research design was adopted; a sample size 600 respondents was drawn from the target population 5705, using the purposive sampling technique. The instrument for data collection was a self-constructed structured questionnaire which had been validated and subjected to Cronbach alpha reliability indexes of .799, .836 and .829 for each measure. The data collection was done after administration and retrieval of questionnaires with the help of trained research assistants from the various sampled states. Out of the 600 questionnaires administered, 522 questionnaires were retrieved and used for analysis. The analysis of data was done using descriptive and inferential statistics with the aid of IBM Statistical Package for Social Science (SPSS) version 26.0; The results indicated Mobile Money Usage with  $\beta = .528$  had a moderate positive predictor on green entrepreneurship while Digital Lending Access with  $\beta = .348$  had a low positive predictor on green entrepreneurship. The study also revealed that mobile money usage and digital lending access can predict green entrepreneurship in Nigeria ( $p < 0.05$ ). The study concluded that mobile money usage and access to digital lending are significant predictors of green entrepreneurship in Nigeria.

The present study, focused on Ikwerre Local Government Area of Rivers State, expands the scope beyond government interventions, considering other entrepreneurial factors. Nnadi (2021) examined the role of youth entrepreneurship in economic development in Kano State. The population included 300 youths involved in various entrepreneurial activities, with a sample size of 150 selected through systematic sampling. Data was collected using questionnaires, with a reliability coefficient of 0.88. Descriptive statistics and correlation analysis were used to determine the relationship between youth entrepreneurship and economic development. Nnadi found that youth entrepreneurship contributed to economic development by creating jobs and reducing poverty. The study recommends increased investment in youth entrepreneurship programmes. This study aligns with the present research but is more focused on youth rather than a broader entrepreneurial ecosystem.

## Problem Statement

Unemployment remains a pressing challenge in Ikwerre Local Government Area of Rivers State, with thousands of youths and graduates struggling to secure sustainable jobs. Despite the government's efforts to promote entrepreneurship through various programmes, many businesses fail due to inadequate funding, poor infrastructure, and lack of managerial skills. The difficulty in accessing loans, coupled with high operational costs and limited market opportunities, stifles entrepreneurial growth. This persistent unemployment crisis contributes to social vices such as youth restiveness and crime. Therefore, this study examines green entrepreneurship and employment generation in Ikwerre Local Government of Rivers State.

## Aim and Objectives

1. To investigate the green entrepreneurship ventures in Ikwerre Local Government Area of Rivers State.
2. To investigate the level employment generation by green entrepreneurship in Ikwerre Local Government Area of Rivers State.
3. To investigate the relationship between green entrepreneurship and employment generation in Ikwerre Local Government Area of Rivers State.

## 1.3 Research Questions

1. What are the green entrepreneurship ventures in Ikwerre Local Government Area of Rivers State?
2. What is the level employment generation by green entrepreneurship in Ikwerre Local Government Area of Rivers State?
3. What is the relationship between green entrepreneurship and employment generation in Ikwerre Local Government Area of Rivers State?

## 1.4 Hypothesis

- H<sub>a</sub>: There is a significant relationship between green entrepreneurship and employment generation in Ikwerre Local Government Area of Rivers State.
- H<sub>0</sub>: There is no significant relationship between green entrepreneurship and employment generation in Ikwerre Local Government Area of Rivers State.

## METHODOLOGY

The study adopted the survey research design and the study location is Ikwerre Local Government Area. Ikwerre Local Government Area is located in Rivers State, Niger Delta, South-South region of Nigeria. The LGA headquarters is in Isiokpo town 'known as the ancient Kingdom of Ikwerre land'. The LGA occupies an estimated total area of about 1,380 square kilometres and has an average temperature of 26 degrees centigrade. The average humidity level of the Local Government Area is about 90 percent with the area witnessing two distinct seasons which are the dry and the rainy seasons. The rainy seasons in Ikwerre Local Government Area last longer than the dry seasons and are usually categorized by heavy showers. It shares boundaries with Imo State to the north, Emohua to the west, Etche to the east and Obio/Akpor to the south. The population for the study is about 316 individuals and business owners engaged in environmentally sustainable or eco-friendly economic activities in the LGA. A sample size 200 respondents were drawn from the target population using the systematic sampling technique.

The instrument for the study was a self-constructed structured questionnaire, the questionnaire comprised of two sections: Section A and B, section A consists of respondents' demographic information which include gender, age, highest educational qualification etc. The second section, section B contained the question items, a structured questionnaire designed to elicit information from the respondents. The items for the structured

questionnaire was a likert scale with four options of Strongly Agree with 4 points, Agree with 3 points, Disagree with 2 points and Strongly Disagree with 1 point. The content validity was used to ensure the validity of the instrument by three experts and a Cronbach Alpha reliability method was used to test the reliability of the questionnaire. The analysis of the Cronbach’s alpha, yield a reliability indexes of .798 and .832 for each measures respectively. The data collection was done after administration and retrieval of the questionnaires with the help of trained research assistants. Out of the 200 questionnaires administered, 164 questionnaires were retrieved and used for analysis. The analysis of data was done using descriptive statistics of mean and standard deviation and inferential statistics of Pearson Product Moment Correlation (PPMC) with the aid of IBM Statistical Package for Social Science (SPSS) version 26.0; a criterion mean of 2.5 was used to compare each item's mean and respective standard deviation score with the criterion mean to determine the respondents' level of agreement, while the inferential statistics was tested at 0.05 significance level with a decision rule that if  $p < 0.05$ , indicates statistical significance.

## DATA ANALYSIS AND DISCUSSIONS

### Data Analysis

**Research Questions 1:** What are the green entrepreneurship ventures in Ikwerre Local Government Area of Rivers State?

Table 3.1.1: Green Entrepreneurship Ventures

Items	N	Mean	Std. Deviation
Waste recycling businesses	164	3.50	.655
Organic farming ventures	164	3.50	.655
Renewable energy businesses such as solar installation	164	3.44	.656
Eco-friendly packaging product businesses	164	3.34	.586
Green transportation initiatives such as electric bikes, fuel-efficient transport services	164	1.34	.462
<b>Criterion Mean = 2.5</b>			

The results in Table 3.1.1 show that most of the identified green entrepreneurship ventures exist in Ikwerre LGA, as their mean scores are above the criterion mean of 2.5. Waste recycling (Mean = 3.50), organic farming (Mean = 3.50), renewable energy businesses (Mean = 3.44), and eco-friendly packaging products (Mean = 3.34) are perceived to be present. However, green transportation initiatives (Mean = 1.34) fall below the criterion mean, indicating that such ventures are largely absent or minimally practiced. The relatively low standard deviations suggest consistency in respondents’ opinions.

**Research Questions 2:** What is the level employment generation by green entrepreneurship in Ikwerre Local Government Area of Rivers State?

Table 3.1.2: Employment Generation by Green Entrepreneurship

Items	N	Mean	Std. Deviation
Green businesses have employed a significant number of youths	164	3.50	.650
Women are now actively employed in green entrepreneurship ventures	164	3.50	.657

Green enterprises provide both full-time and part-time employment opportunities	164	3.64	.665
Green entrepreneurship has reduced unemployment	164	3.44	.653
Green ventures provide skill development and training opportunities	164	3.40	.494
<b>Criterion Mean = 2.5</b>			

Table 3.1.2 indicates that green entrepreneurship significantly contributes to employment generation in Ikwerre LGA. All items recorded mean scores above the criterion mean of 2.5. Respondents agreed that green businesses employ youths (Mean = 3.50), women (Mean = 3.50), and provide both full-time and part-time jobs (Mean = 3.64). They also agreed that green ventures reduce unemployment (Mean = 3.44) and offer skill development opportunities (Mean = 3.40). The relatively low standard deviations indicate general agreement among respondents. This suggests that green entrepreneurship positively impacts employment in the area.

**Research Questions 3:** What is the relationship between green entrepreneurship and employment generation in Ikwerre Local Government Area of Rivers State?

Table 3.1.3: Relationship between Green Entrepreneurship and Employment Generation

Variables	n	r	Remarks
Green Entrepreneurship			
	164	.757	High Positive Relationship
Employment Generation			

In Table 3.1.3, the r-value of .76 reveals a high positive relationship between green entrepreneurship and employment generation. This result implies that as green entrepreneurship increases, there is also a corresponding increase in employment generation.

**Hypothesis:** There is no significant relationship between green entrepreneurship and employment generation in Ikwerre Local Government Area of Rivers State.

Table 3.1.4: Relationship between Green Entrepreneurship and Employment Generation

Variables	n	r	p-value	Decision
Green Entrepreneurship				
	164	.757	.000	Significant
Employment Generation				

In Table 3.1.4, it was revealed that the relationship between green entrepreneurship and employment generation is significant at 0.05 alpha level, because the p-value of .000 is less than 0.05 alpha level (.000 < .05). This means that the null hypothesis is rejected hence; there is a significant relationship between green entrepreneurship and employment generation in Ikwerre Local Government Area of Rivers State.

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## DISCUSSIONS

The findings reveal that several forms of green entrepreneurship ventures are actively present in Ikwerre Local Government Area (LGA). Waste recycling, organic farming, renewable energy businesses and eco-friendly packaging recorded mean scores above the criterion mean, indicating respondents' agreement on their existence. The finding is similar with the findings of Wachucku et al. (2026). Wachucku et al. (2026) investigated the impact of mobile money and digital lending platforms on green entrepreneurship in Nigeria. They identified eco-friendly products/services, solar energy, waste recycling, organic farming and waste management as the types of green entrepreneurship ventures in Nigeria. This suggests that environmentally sustainable business practices are gradually gaining ground in the area. However, green transportation initiatives recorded a very low mean score, indicating limited development in that sector. This may be attributed to high capital requirements, low technological adoption or limited infrastructural support. Furthermore, the findings show that green entrepreneurship contributes meaningfully to employment generation in Ikwerre LGA. Respondents agreed that green businesses provide employment opportunities for youths and women, create both full-time and part-time jobs, reduce unemployment and offer skill development opportunities. This implies that green entrepreneurship not only supports environmental sustainability but also promotes socio-economic development within the area. The finding is still similar with the findings of Wachucku et al. (2026). The results indicated mobile money usage and digital lending access had positive predictor on green entrepreneurship. The study also revealed that mobile money usage and digital lending access can predict green entrepreneurship in Nigeria.

The findings reveal that there is a high positive relationship between green entrepreneurship and employment generation. And also the study revealed that there is a significant relationship between green entrepreneurship and employment generation in Ikwerre Local Government Area of Rivers State. The strong positive relationship suggests that green entrepreneurship—such as recycling ventures, renewable energy services, sustainable agriculture, and eco-friendly production—creates diverse employment opportunities, particularly for youths and unskilled labor. These ventures tend to be labor-intensive and innovative, thereby absorbing a significant portion of the workforce. Also, the significance of the relationship indicates that green entrepreneurship is not just marginally related to employment generation but plays a substantial and measurable role in reducing unemployment in the study area. This could be attributed to the increasing awareness of environmental issues and the growing demand for sustainable products and services, which in turn encourages business formation in green sectors. The finding is also in agreement with existing empirical studies such as Wachucku et al. (2026), whose findings revealed that mobile money usage and digital lending access can predict green entrepreneurship in Nigeria. The finding also aligns with the Human Capital Theory, which posits that investments in education, skills, knowledge, and training enhance individuals' productivity and capacity to contribute to economic growth. Green entrepreneurship relies heavily on specialized skills, technical knowledge, and innovative capabilities, which are all components of human capital.

## CONCLUSIONS

Based on the findings, it is concluded that green entrepreneurship ventures are present in Ikwerre Local Government Area (LGA) of Rivers State, particularly in waste recycling, organic farming, renewable energy and eco-friendly packaging. However, green transportation initiatives are largely underdeveloped. This indicates that while green business activities exist, certain sectors still require expansion and policy support. In addition, green entrepreneurship significantly contributes to employment generation in the area. The ventures create opportunities for youths and women, provide both full-time and part-time jobs and support skill development. In all, green entrepreneurship plays a positive role in promoting sustainable economic development and reducing unemployment in Ikwerre LGA.

## RECOMMENDATIONS

Based on the findings, the following recommendations are made:

1. The government and private investors should encourage investment in eco-friendly transport systems such as electric bikes and fuel-efficient vehicles through incentives and awareness campaigns.

2. The government and NGOs should provide targeted training, soft loans and startup support to further increase youth and women employment in green enterprises.
3. The government and NGOs should organize regular workshops and skill acquisition programmes to improve technical knowledge in renewable energy, waste management and sustainable agriculture.

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