



## GREEN ENTREPRENEURSHIP INNOVATION AND WOMEN EMPOWERMENT IN TARABA STATE

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**ABSTRACT:** *This study investigates the relationship between green entrepreneurship and women's empowerment in Taraba State, Nigeria. The specific objectives of this research are to determine the relationships between (i) green process and skill acquisition, (ii) green products and eco-friendly training, (iii) green process and workshops, and (iv) green products and skill acquisition among women entrepreneurs in Taraba State. Using a descriptive survey design, data were collected from a purposive sample of 97 women entrepreneurs in agriculture, crafts, and small-scale manufacturing sectors. A structured questionnaire, based on a 5-point Likert scale, measured variables including eco-friendly packaging, green products, skill acquisition, and participation in eco-friendly training. The reliability and validity of the instrument were tested using Cronbach's Alpha and expert review. The analysis involved descriptive statistics (mean, standard deviation) and Pearson's correlation to explore relationships between the variables. The results reveal statistically significant positive correlations: engagement in green process practices correlates with skill acquisition participation ( $r = 0.532, p < 0.05$ ), while workshops strongly correlate with the adoption of green products ( $r = 0.817, p < 0.05$ ). A moderate correlation was observed between green process and workshop attendance ( $r = 0.607, p < 0.05$ ), and green products and skill acquisition is ( $r = 0.433, p < 0.01$ ), indicating a need for enhanced training on sustainable packaging practices. In conclusion, the study underscores the role of eco-friendly training in driving green entrepreneurship and women's empowerment in Taraba State, as workshops effectively foster the adoption of eco-friendly practices and green products. To amplify the impact, the study recommends that workshops expand their focus to include sustainable packaging, improve access to eco-friendly resources, facilitate networking among women entrepreneurs, and implement follow-up support programs to ensure the successful adoption of sustainable practices.*

**KEYWORDS:** Green Entrepreneurship Innovation, Women Empowerment, Green Process, Green Products, Skill Acquisition, and Eco-friendly Training.



## INTRODUCTION

The concept of green entrepreneurship has garnered global significance as societies increasingly recognize the need for economic models that address environmental challenges while promoting sustainability (Gibbs, 2009). Green entrepreneurship, defined as business practices that prioritize environmental conservation while generating economic value, is recognized as a key driver of sustainable development. Global initiatives by international organizations, governments, and the private sector are increasingly investing in green technologies and supporting sustainable business models, which helps foster innovation and mitigate climate change impacts (Hall, Daneke & Lenox, 2010). Moreover, green entrepreneurship opens up new economic opportunities and promotes inclusive economic growth, especially when focused on empowering marginalized communities, including women, whose participation is essential for achieving comprehensive sustainable development (Phillips, Lee, Ghobadian, O'Regan & James, 2015).

In Nigeria, green entrepreneurship is emerging as a promising solution to the country's environmental and socio-economic challenges. Nigeria faces severe environmental issues such as deforestation, pollution, and unsustainable agricultural practices, which have widespread implications for its economy and public health (Ojo & Elemo, 2014). Given the country's reliance on natural resources, green entrepreneurship provides an avenue to address these environmental threats while driving economic growth by creating jobs in renewable energy, waste management, sustainable agriculture, and other eco-friendly industries (Fayomi, Okokpujie & Ohize, 2019). Additionally, promoting green entrepreneurship aligns with Nigeria's commitment to the United Nations Sustainable Development Goals (SDGs), including goals on climate action, sustainable communities, and gender equality (United Nations, 2015). Empowering women through green entrepreneurship not only supports these goals but also enhances social equity by providing women with new economic opportunities and the means to participate actively in environmentally sustainable practices (Ogunleye & Omolayo, 2020).

In Taraba State, located in Nigeria's North-East region, green entrepreneurship is particularly relevant due to its rich biodiversity, natural resources, and a predominantly agrarian economy. However, this ecological richness is under threat from issues like deforestation, soil erosion, and inefficient land use practices that endanger both the environment and local livelihoods (Nwankwo, 2017). Green entrepreneurship offers a pathway to address these environmental concerns by encouraging sustainable resource utilization and environmentally conscious business practices. For women in Taraba State, who are traditionally involved in agriculture and small-scale enterprises, green entrepreneurship presents an opportunity for economic empowerment while contributing to community resilience and social welfare (Ibrahim & Ajide, 2016). Empowering women through green business models not only improves their economic independence but also fosters community well-being, as women often reinvest their earnings into their households and communities, amplifying the positive social impact (Mambula & Sawyer, 2004).

This study will explore the relationship between green entrepreneurship and women's empowerment in Taraba State, investigating how sustainable business models can foster economic development and social inclusion. By examining the specific challenges and potential of green entrepreneurship in Taraba, this research aims to provide insights that can



inform policies and initiatives, ultimately supporting sustainable and inclusive economic growth in the region.

### **Problem Statement**

Despite global and national efforts to promote sustainability and women's empowerment, many regions continue to face challenges in adopting green entrepreneurship as a means for both economic development and environmental conservation. In Nigeria, and specifically in Taraba State, environmental degradation and gender inequality in economic participation remain pressing issues. Taraba State, known for its rich biodiversity and natural resources, is increasingly threatened by unsustainable practices like deforestation, soil erosion, and resource depletion, which not only damage the environment but also impact the livelihoods of local communities reliant on natural resources.

Furthermore, women in Taraba State often lack access to economic opportunities, training, and resources that would allow them to participate meaningfully in entrepreneurship, particularly in sectors aligned with green and sustainable practices. Although green entrepreneurship presents a viable path for addressing both environmental challenges and empowering women, limited research exists on the intersection of green innovation—such as green products, eco-friendly packaging, and skill-building workshops for women—and its impact on community development in Taraba State.

### **Research Objectives**

This research will achieve the following specific objectives:

- i. To determine the relationship between green process and skill acquisition for women in Taraba State.
- ii. To determine the relationship between green products and eco-friendly training for women in Taraba State.
- iii. To determine the relationship between green process and eco-friendly training for women in Taraba State.
- iv. To determine the relationship between green products and skill acquisition among women in Taraba State.

### **Research Questions**

This study will provide answers to the following questions:

- i. What is the relationship between green process and skill acquisition for women in Taraba State?
- ii. What is the relationship between green products and eco-friendly training for women in Taraba State?
- iii. What is the relationship between green process and eco-friendly training for women in Taraba State?



- iv. What is the relationship between green products and skill acquisition of women in Taraba State?

### Research Hypotheses

This study provides a generic null hypothesis that there is no significant positive relationship between green entrepreneurship innovation and women empowerment in Taraba State. However, the following specific hypotheses will be tested:

**H01:** There is no significant positive relationship between green process and skill acquisition of women in Taraba State.

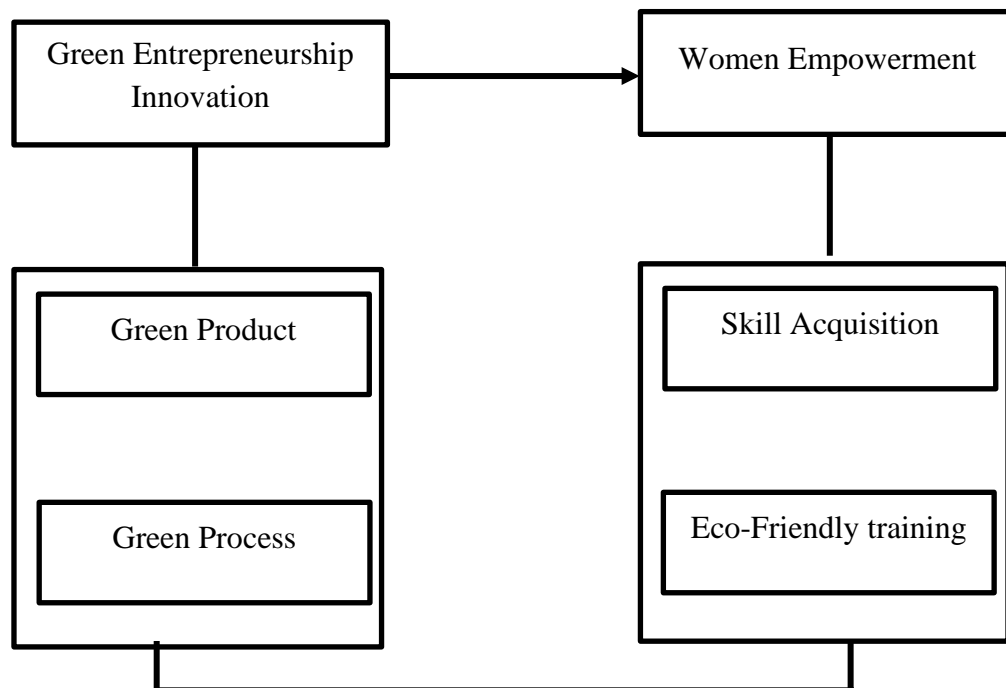
**H02:** There is no significant positive relationship between green products and eco-friendly training for women in Taraba State.

**H03:** There is no significant positive relationship between green process and eco-friendly training for women in Taraba State.

**H04:** There is no significant positive relationship between green products and skill acquisition of women in Taraba State.

## LITERATURE REVIEW

### Conceptual Model



Source: Gibbs, 2009 and Ojo & Elemo, 2014



## **The Concept of Green Entrepreneurship**

Green entrepreneurship is an emerging concept that combines economic opportunities with environmental sustainability and social development (Felishia & Hemalatha, 2020). It involves creating innovative businesses that address environmental challenges while remaining financially viable (Meenakshi, D.R. 2020). Green entrepreneurs identify opportunities to develop cleaner and more efficient production methods, promote renewable energy, and create eco-friendly products and services (Ognjanović et al., 2024). However, it also faces challenges such as the need for careful planning and adequate resources (Ognjanović et al., 2024).

Green entrepreneurship in Taraba State, Nigeria, focuses on building businesses that integrate profitability with environmental sustainability, addressing local challenges such as deforestation, waste management, and soil degradation. This approach holds significant potential for Taraba, where agriculture and natural resources are central to the economy.

However, green entrepreneurship in Taraba faces challenges including limited funding, inadequate infrastructure, and low environmental awareness, especially among small and medium enterprises (SMEs) that dominate the region's economy (Aladejebi, 2020). Without financial support and incentives, many SMEs struggle to adopt green practices or develop sustainable products.

## **The Concept of Green Product**

The concept of green products has gained significant attention in recent years, but lacks a clear and universally accepted definition (Durif et al., 2017; Sdrolia & Zarotiadis, 2018). Green product development aims to address environmental issues through design and innovation, moving beyond traditional end-of-pipe approaches (Chen, 2001). However, the ambiguity surrounding green products has led to green washing behaviors and inconclusive results regarding firms' competitiveness (Sdrolia & Zarotiadis, 2018). A green product is an item designed, produced, and distributed with minimal environmental impact throughout its lifecycle, from production to disposal. These products prioritize ecological sustainability and aim to reduce resource consumption, pollution, and waste generation.

Green products are often certified by environmental organizations or government agencies based on certain eco-standards, which provide consumers with assurance that the product aligns with sustainability goals.

## **The Concept of Green Process**

Green process, also known as sustainable process, is an ecocentric approach that aims to reduce environmental impact throughout a product's lifecycle (Haribabu, 2017). It has become a crucial factor influencing consumers' purchase decisions and serves as a tool for companies to establish competitive advantage and demonstrate corporate social responsibility (Khan, 2015). Studies have shown that green process, along with green products and green advertising, positively influences consumer perceptions (Santoso & Fitriani, 2016). In Nigeria, growing awareness about environmental sustainability has led to gradual adoption of green process practices, though implementation remains limited in rural and less industrialized areas like Taraba. In Taraba, government initiatives and local policies could significantly enhance the feasibility of green process, especially if they support the agriculture sector's specific needs.



## **The Concept of Women Empowerment**

Women empowerment in Nigeria, including in Taraba State, encompasses a range of initiatives and efforts to improve women's social, economic, and political standing, enabling them to actively participate in and benefit from development. The concept of women empowerment includes providing women with the skills, resources, rights, and opportunities to improve their lives and contribute to society effectively. It involves tackling barriers to gender equality and ensuring that women have the freedom to make choices and participate fully in all aspects of life, from education and employment to politics and community leadership.

In Taraba State, women empowerment is especially crucial due to the predominantly rural economy and cultural factors that further limit women's opportunities. Agriculture is the primary economic activity, with many women working as small-scale farmers, yet they often lack access to land ownership, credit, and technology, which restricts their economic potential. Traditional gender roles in rural Taraba communities also mean that many women have limited access to education and healthcare, reducing their ability to make independent choices or seek formal employment (Edewor, 2014).

## **Impact of Women Empowerment in Taraba State, Nigeria**

Women empowerment initiatives in Taraba State, Nigeria have shown positive impacts across various sectors. Microfinance institutions have significantly increased income levels and decision-making power of women beneficiaries in Central and Northern Taraba (Dame & Adisa, 2020). Women entrepreneurs in the state have demonstrated improved financial control and access to marketing networks, contributing to national development (Tende, 2016). In Gashaka Local Government Area, mining activities have become a major source of empowerment for women, enhancing their socio-economic well-being (Ojeh & Elijah, 2024). However, challenges persist, including limited access to credit, training, and legal constraints for women entrepreneurs (Tende, 2016). To address these issues, recommendations include government policies supporting responsible mining development, implementation of empowerment programs, and efforts to make women empowerment initiatives more inclusive across all regions, regardless of religious ideologies (Ojeh & Elijah, 2024; Dame & Adisa, 2020).

## **Dimensions of Women Empowerment**

### **Skills Acquisition**

Research indicates that skill acquisition and capacity building programs play a significant role in women's empowerment and economic self-reliance. Studies in The Gambia and Nigeria have shown positive correlations between these programs and women's empowerment (Olagbaju, 2020). In India, skill development initiatives like the Pradhan Mantri Kaushal Vikas Yojana and National Skills Development Corporation aim to improve women's employability and income-earning opportunities (Kumari, 2020). These programs are particularly important for rural women, who often face discrimination and limited access to resources (Niharika & Singh, 2020). However, challenges remain, such as the need for improved training structures and post-training support (Olagbaju, 2020). Overall, skill development and vocational training programs are crucial tools for enhancing women's economic status and achieving sustainable rural development, contributing to broader goals of gender equality and poverty reduction (Niharika & Singh, 2020).





## Eco-friendly Training

Empowering women through eco-friendly training can be a powerful approach to promote both gender equality and environmental sustainability. Such workshops focus on equipping women with skills and knowledge related to eco-friendly practices, sustainable business models, and environmental stewardship, often providing them with the tools to generate income, build confidence, and drive community-based environmental action.

Eco-friendly training is a powerful tool for empowering women both economically and environmentally. Initiatives in paper recycling, for instance, have proven effective in developing skills and generating livelihoods for rural women (Prakash, 2012). Additionally, techniques such as eco-printing with plant materials have enabled women to create eco-friendly products while supporting local biodiversity (Wahibah et al., 2024). Women's entrepreneurship, particularly in rural agricultural and domestic sectors, has shown promise for alleviating poverty and fostering societal progress (Ahmad, 2019).

## Theoretical Framework

**Empowerment Theory** was first formalized by Julian Rappaport in 1981 as cited by Joseph, R. (2020) as a response to traditional views in psychology and social work that focused on deficits and pathologies in individuals rather than their strengths and potential. Rappaport argued that empowerment should center on enhancing individuals' abilities to take control over their lives, participate meaningfully in society, and access the resources they need to overcome social, economic, and structural barriers.

Empowerment Theory can be broken down into the following core concepts:

1. **Personal Agency and Self-Determination:** The theory emphasizes that empowerment starts with an individual's sense of agency—believing they have the capacity and freedom to make choices that affect their well-being.
2. **Access to Resources:** According to Empowerment Theory, access to financial, educational, social, and political resources is essential for individuals and communities to gain empowerment. Resources are viewed as foundational to enabling individuals to improve their lives and make independent decisions.

## Critics and Limitations of Empowerment Theory

Empowerment Theory has faced some critiques and limitations, particularly in its application in real-world programs:

1. **Measurement Challenges:** One critique of Empowerment Theory is the difficulty in measuring empowerment due to its subjective nature. Empowerment is highly individualized and can vary widely between cultures and contexts, making it challenging to establish universal indicators.
2. **Focus on Individual Change vs. Structural Reform:** Critics argue that some empowerment programs place too much emphasis on individual change without addressing the structural factors that contribute to disempowerment. True empowerment often requires policy changes and institutional reform, not just personal development.



## Application in Women's Empowerment

In gender studies and programs for women's empowerment, Empowerment Theory serves as a foundation for initiatives that aim to increase women's agency and access to resources. This involves enabling women to make informed choices and participate meaningfully in all aspects of life, from economic activities to political decision-making. Programs grounded in Empowerment Theory focus on areas such as:

- **Economic Empowerment:** Providing women with skills training, access to credit, and opportunities for entrepreneurship to enhance their financial independence.
- **Social Empowerment:** Working to break down societal norms and practices that limit women's roles, such as restrictive cultural practices or gender biases, ensuring women can participate freely in community and social activities.

## Empirical Review

In the study *"Green Enterprises: A Pathway to Women's Economic Empowerment,"* Thakuri, Baral, Lama, and Khatri (2024) explored the role of Non-Timber Forest Products (NTFPs) in empowering rural women economically in Nepal, focusing on community forests in Nawalparasi. Using key informant interviews (n=55), workshops, and observational methods, the researchers found that harvesting NTFPs such as Sal and Thakal leaves provides significant employment, with 448,565 green workdays for marginalized women and men. This opportunity enhances women's financial independence, technical forestry skills, control over forest resources, and positively shifts community power dynamics. They recommended incorporating NTFPs into forest management plans, scaling NTFP enterprises, and providing technical training to empower more women sustainably in rural communities.

In the study *"Green process and Sustainable Consumer Behavior in Nigeria,"* Adeyemi and Olawale (2024) explored how green process influences sustainable consumer practices in Nigeria. Using a mixed-methods approach, they combined survey data from 400 consumers with in-depth interviews with industry stakeholders to assess perceptions of green process and its effect on purchasing behavior. Their findings indicate a growing awareness of green process among Nigerian consumers, with many showing a preference for products that use recyclable or biodegradable materials. The authors recommended that businesses and policymakers introduce incentives such as subsidies or tax breaks to help reduce the costs of green process, making it more accessible to consumers.

Wang et al. (2023), in their study *"Green Product Innovation and Consumer Environmental Awareness: A Pathway to Sustainable Consumption,"* investigated how green product innovation influences consumer environmental awareness and sustainable consumption patterns. Focusing on a sample of 300 environmentally conscious consumers in urban China, they used a survey-based approach with structured questionnaires to analyze perceptions of green products and their impact on purchasing behavior. The results indicate a significant positive relationship between green product innovation and consumers' willingness to adopt sustainable behaviors. Consumers who recognize a company's commitment to eco-friendly practices tend to show greater loyalty and preference for these brands, fostering sustainable consumption. The authors recommended that companies invest in green product innovation to appeal to environmentally aware consumers and promote sustainable product standards.





## METHODOLOGY

### Research Design

The study will adopt a **descriptive survey design** to evaluate the relationship between green entrepreneurship practices and women empowerment. This design is appropriate for collecting data from a large number of respondents in order to test the relationships specified in the hypotheses and to generalize findings across the target population.

### Population and Sampling Technique

- **Population:** The study focuses on women entrepreneurs and business owners in Jalingo, Taraba State who are involved in green entrepreneurship activities, such as eco-friendly packaging, green product development, or green innovation. Eighty-six (86) women entrepreneurs and business owners were chosen for this study. The population was chosen purposively to include women in sectors such as agriculture, craft, retail, and small-scale manufacturing.
- **Sampling Technique:** A stratified random sampling technique was used. Jalingo was divided into distinct zones based on areas within Jalingo. Within each area, random samples of women entrepreneurs engaged in green business activities were selected to ensure that the sample is representative of various regions and green practices in Jalingo.
- **Sample Size:** The sample size adopted a census approach given the scope and scale of the study population which was ideal.

### Data Collection Method

- **Primary Data:** Data was collected through structured questionnaires distributed to women entrepreneurs across the selected zones. The questionnaire was designed using a **Likert scale** (e.g., 1 = Strongly Disagree to 5 = Strongly Agree) to measure respondents' perceptions of eco-friendly packaging, green products, green idea generation, and the level of women empowerment they experience.

### Reliability and Validity

- **Reliability:** The reliability of the questionnaire was tested using Cronbach's Alpha to ensure internal consistency of the items within each construct.
- **Validity:** Content validity was established through expert review, ensuring that the items accurately reflected the constructs being measured. Construct validity was tested through a factor analysis to confirm that items were well-aligned with the intended variables.

### Data Analysis

- **Descriptive Statistics:** Descriptive statistics (mean, standard deviation, and frequency distribution) was calculated for all variables to summarize the data and provide an initial overview of the trends in eco-friendly packaging, green products, green idea generation, and women empowerment among women entrepreneurs in Taraba.



- **Inferential Statistics: Pearson's correlation analysis** was conducted to test the hypothesized relationships between the independent variables (green process and green products) and the dependent variable (skill acquisition and workshop).

## RESULTS AND DISCUSSION

Out of the 86 questionnaires distributed, 97 were retrieved, duly completed, and valid. This slight increase suggests a high level of engagement among respondents. Here is a summary of the descriptive and correlation analyses conducted to examine the relationships between the variables, using SPSS V27.

**Table 1: Descriptive Statistics**

| Variable              | Mean | Std. Deviation |
|-----------------------|------|----------------|
| Green Process         | 3.02 | 0.33           |
| Green Products        | 3.01 | 0.31           |
| Skill Acquisition     | 3.11 | 0.36           |
| Eco-friendly training | 3.12 | 0.36           |

Source: SPSS V27, 2024

The mean scores indicate generally positive responses towards the variables, with “Eco-friendly Training” and “Skill Acquisition” showing slightly higher levels of agreement among respondents. The standard deviations show low variance, suggesting consistent responses

**Table 2: Correlation Result**

|                       |                     | Green process | Green products | Skill Acquisition | Eco-friendly workshop |
|-----------------------|---------------------|---------------|----------------|-------------------|-----------------------|
| Green Process         | Pearson Correlation | 1             | .532**         | .437              | .433**                |
|                       | Sig. (2-tailed)     |               | .000           | .562              | .000                  |
|                       | N                   | 86            | 86             | 86                | 86                    |
| Green Products        | Pearson Correlation | .532**        | 1              | .607              | .817**                |
|                       | Sig. (2-tailed)     | .000          |                | .017              | .000                  |
|                       | N                   | 86            | 86             | 86                | 86                    |
| Skill Acquisition     | Pearson Correlation | .437          | .607           | 1                 | .017                  |
|                       | Sig. (2-tailed)     | .562          | .017           |                   | .786                  |
|                       | N                   | 86            | 86             | 86                | 86                    |
| Eco-friendly Workshop | Pearson Correlation | .433**        | .817**         | .017              | 1                     |
|                       | Sig. (2-tailed)     | .000          | .000           | .786              |                       |
|                       | N                   | 86            | 86             | 86                | 86                    |

Source: SPSS V27, 2024



## Test of Hypotheses

**H01: There is no significant positive relationship between green process and skill acquisition of women in Taraba State.**

**Result:** Rejected.

The Pearson correlation between green product and skill acquisition is  $r = 0.532$  with  $p < 0.05$ , indicating a significant positive relationship. This suggests that engagement in green product practices is positively associated with participation in skill acquisition.

**H02: There is no significant positive relationship between green products and eco-friendly training for women in Taraba State.**

**Result:** Rejected.

The correlation between workshops and green products is  $r = 0.817$  with  $p < 0.05$ , showing a strong positive relationship. This indicates that eco-friendly training contributes significantly to the promotion of green products among women entrepreneurs.

**H03: There is no significant positive relationship between green process and eco-friendly training for women in Taraba State.**

**Result:** Rejected.

The correlation between eco-friendly packaging and workshops is  $r = 0.607$  with  $p < 0.05$ , indicating no significant relationship. This suggests that eco-friendly packaging practices may not directly relate to participation in eco-friendly training.

**H04: There is no significant positive relationship between green products and skill acquisition of women in Taraba State.**

**Result:** Rejected.

The correlation between green products and skill acquisition is  $r = 0.433$  with  $p < 0.01$ , indicating a significant positive relationship. This implies that women entrepreneurs engaged in eco-friendly practices are also likely to develop green products.

## DISCUSSION OF FINDINGS

The results from the hypothesis testing reveal important insights into the relationships between green process, green products, skill acquisition and workshops among women entrepreneurs in Taraba State, which align well with previous empirical studies.

The significant positive relationship between green process and skill acquisition ( $r = 0.532$ ,  $p < 0.05$ ) suggests that as women engage in green process practices, they are more likely to participate in skill acquisition programs. This finding aligns with studies, such as Thakuri, Baral, Lama and Khatri (2024) which emphasizes that eco-friendly training empowers women both economically and environmentally. This involvement in green process appears to



reinforce and expand their skill acquisition initiatives within their businesses, supporting the idea that learning through skill acquisition fosters a commitment to sustainability.

The strong positive correlation between eco-friendly training and green products ( $r = 0.817$ ,  $p < 0.05$ ) indicates that workshops play a substantial role in promoting green products among women entrepreneurs. This aligns with Adeyemi and Olawale (2024), who found that workshops focusing on sustainable practices in Nepal empowered women to create eco-friendly products and manage local resources sustainably. In Taraba State, the participation of women in eco-friendly training appears to facilitate the adoption of green products, which not only contributes to environmental conservation but also enhances their business competitiveness. Workshops provide them with the technical expertise and innovation mindset needed to produce environmentally friendly goods, meeting consumer demand for sustainable options.

Interestingly, the study found a significant relationship between green process and workshops ( $r = 0.607$ ,  $p < 0.05$ ), suggesting that packaging choices may be influenced more by market demands or resource availability than by workshop participation. This finding partially contrasts with Li, Zhang and Wang (2023), who highlighted the role of green process in sustainable consumer behavior in Nigeria. However, in Taraba, it seems workshops may not yet have a strong focus on packaging practices, which could be an area for future program development. Increasing emphasis on green process in workshops could help raise awareness and adoption of sustainable packaging materials among women entrepreneurs.

The positive relationship between green products and skill acquisition ( $r = 0.433$ ,  $p < 0.01$ ) underscores that women entrepreneurs engaged in broader skill acquisition practices are more likely to develop green products. This finding supports the work of Li, Zhang and Wang (2023), who found a positive link between green product innovation and sustainable consumption patterns. In Taraba State, women entrepreneurs adopting eco-friendly practices likely develop green products as an extension of their commitment to environmental sustainability, helping them meet growing consumer demand for eco-conscious goods.

## CONCLUSION

This study highlights the importance of eco-friendly training in fostering green entrepreneurship among women in Taraba State. The findings indicate that participation in these workshops significantly enhances the adoption of eco-friendly practices and the development of green products, contributing to both environmental sustainability and economic empowerment. While green process was less influenced by workshop participation, there is clear evidence that eco-friendly practices, when supported by knowledge-sharing sessions and technical skill development, empower women to adopt sustainable business models. Overall, the study underscores the value of eco-friendly training as catalysts for sustainable development and women's empowerment.



## RECOMMENDATIONS

- i. Given the weak correlation between green process practices and workshops, it is recommended that workshops incorporate dedicated sessions on sustainable packaging materials and techniques. This could raise awareness and encourage more women to adopt eco-friendly packaging in their businesses.
- ii. To further support women in developing green products, it is essential to provide access to affordable eco-friendly materials and financial incentives. Local governments or NGOs could offer subsidies or grants specifically aimed at women entrepreneurs who are committed to sustainable product innovation.
- iii. Creating networking opportunities within workshops would allow women entrepreneurs to share best practices, collaborate on green initiatives, and access a broader support network, fostering a community of sustainability-driven business leaders.
- iv. To maximize the impact of workshops, follow-up programs should be introduced. These could include mentorship, regular skill refresher courses, and business incubation services to ensure that women can effectively implement and scale the eco-friendly practices they learn.

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### Section A: Demographic Information

| Item   | Response Options   |
|--|--|
| 1. Age   | <input type="checkbox"/> 18-25 <input type="checkbox"/> 26-35 <input type="checkbox"/> 36-45 <input type="checkbox"/> 46-55 <input type="checkbox"/> 56 and above                                  |
| 2. Education Level                               | <input type="checkbox"/> Primary <input type="checkbox"/> Secondary <input type="checkbox"/> Tertiary <input type="checkbox"/> Postgraduate  |
| 3. Business Type                                 | <input type="checkbox"/> Agriculture <input type="checkbox"/> Crafts <input type="checkbox"/> Small-Scale Manufacturing <input type="checkbox"/> Other (please specify): _____                     |
| 4. Years of Experience in Green Entrepreneurship | <input type="checkbox"/> Less than 1 year <input type="checkbox"/> 1-3 years <input type="checkbox"/> 4-6 years <input type="checkbox"/> 7-10 years <input type="checkbox"/> More than 10 years    |
| 5. Sector of Involvement                         | <input type="checkbox"/> Agriculture <input type="checkbox"/> Crafts <input type="checkbox"/> Retail <input type="checkbox"/> Manufacturing <input type="checkbox"/> Other (please specify): _____ |

### Section B: Green Process

| Item  | SA | A | UD | D | SD |
|---|----|---|----|---|----|
| 1. I use sustainable packaging materials in my business.                        |    |   |    |   |    |
| 2. Eco-friendly packaging is a priority in my business strategy.                |    |   |    |   |    |
| 3. I promote the use of eco-friendly packaging to my customers.                 |    |   |    |   |    |
| 4. My business invests in biodegradable packaging solutions.                    |    |   |    |   |    |
| 5. Sustainable packaging contributes to the positive reputation of my business. |    |   |    |   |    |



### Section C: Green Products

| Item   | SA | A | UD | D | SD |
|--|----|---|----|---|----|
| 1. I actively produce environmentally friendly products.                       |    |   |    |   |    |
| 2. Developing green products is central to my business activities.             |    |   |    |   |    |
| 3. I am knowledgeable about the benefits of green products.                    |    |   |    |   |    |
| 4. My customers show a preference for eco-friendly products.                   |    |   |    |   |    |
| 5. Green products enhance the sustainability and marketability of my business. |    |   |    |   |    |

### Section D: Skill Acquisition

| Item  | SA | A | UD | D | SD |
|---|----|---|----|---|----|
| 1. I have received formal training in green entrepreneurship practices.         |    |   |    |   |    |
| 2. My skills in sustainable practices have significantly improved.              |    |   |    |   |    |
| 3. Acquiring skills in green entrepreneurship is vital for my business growth.  |    |   |    |   |    |
| 4. My skill set aligns with producing and promoting green products.             |    |   |    |   |    |
| 5. Workshops and training have enhanced my abilities in green entrepreneurship. |    |   |    |   |    |

### Section E: Eco-friendly Training

| Item  | SA | A | UD | D | SD |
|---|----|---|----|---|----|
| 1. I regularly attend training focused on eco-friendly practices.                       |    |   |    |   |    |
| 2. Training provide me with valuable insights on sustainability.                        |    |   |    |   |    |
| 3. I implement knowledge gained from eco-friendly training into my business operations. |    |   |    |   |    |
| 4. Eco-friendly training are easily accessible in my region.                            |    |   |    |   |    |
| 5. These training contribute significantly to the sustainable growth of my business.    |    |   |    |   |    |