

Agropreneurship as strategy for achieving the UN Sustainable Development Goal 2 [Zero Hunger]: The Nigerian context

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Abstract

Purpose: This study empirically investigated the relationship between Agropreneurship and the achievement of the United Nations Sustainable Development Goal 2 - Zero Hunger, in the Nigerian Context.

Design/methodology/approach: Utilizing a descriptive survey design, data were collected from 200 Agropreneurship employees in Delta State, Nigeria, through the administration of a structured questionnaire employing a Likert scale. Statistical analyses, including descriptive statistics and correlation analysis, were conducted to assess the relationship between Agropreneurship activities and the attainment of SDG 2.

Findings: The findings demonstrate a significant and positive correlation between Agropreneurship activities and the achievement of Zero Hunger. Key findings indicate that Agropreneurship is a potent strategy for achieving SDG 2, contributing positively to food security, sales, and distribution. Furthermore, the study revealed that Agropreneurs and their activities play a crucial role in advancing the broader set of Sustainable Development Goals.

Originality/value: This research provides valuable insights into the potential of Agropreneurship in achieving sustainable development objectives and contributes to the growing body of knowledge in this emerging field. The study recommends Strengthening of Policy Support, Access to Resources and capacity building amongst others, as steps towards the achievement of Zero Hunger UN SDG 2 target.

Keywords: Agropreneurship, food security Zero Hunger, strategy, UN sustainable development goal, Nigeria

BM Sürdürülebilir Kalkınma Hedefi 2'ye [Sıfır Açlık] ulaşma stratejisi olarak tarım girişimciliği: Nijerya bağlamı

Özet

Amaç: Bu çalışma, Tarımsal Girişimcilik ile Birleşmiş Milletler Sürdürülebilir Kalkınma Hedefi 2 - Sıfır Açlık hedefine ulaşılması arasındaki ilişkiyi Nijerya bağlamında ampirik olarak araştırmıştır.

Tasarım/metodoloji/yaklaşım: Tanımlayıcı bir anket tasarımı kullanılarak, Nijerya'nın Delta Eyaletindeki 200 Tarımsal Girişimcilik çalışanından Likert ölçeği kullanan yapılandırılmış bir anketin uygulanması yoluyla veri toplanmıştır. Tarımsal girişimcilik faaliyetleri ile SKH 2'ye ulaşılması arasındaki ilişkiyi değerlendirmek için tanımlayıcı istatistikler ve korelasyon analizi dahil olmak üzere istatistiksel analizler yapılmıştır.

Bulgular: Bulgular, Tarımsal Girişimcilik faaliyetleri ile Sıfır Açlık hedefine ulaşılması arasında anlamlı ve pozitif bir ilişki olduğunu göstermektedir. Temel bulgular, Tarımsal Girişimciliğin SKA 2'ye ulaşmak için güçlü bir strateji olduğunu ve gıda güvenliği, satışı ve dağıtımına olumlu katkıda bulunduğunu göstermektedir. Ayrıca çalışma, tarımsal girişimcilik faaliyetlerinin daha geniş kapsamlı sürdürülebilir kalkınma hedeflerinin ilerletilmesinde önemli bir rol oynadığını ortaya koymuştur.

Özgünlük/değer: Bu araştırma, tarımsal girişimciliğin sürdürülebilir kalkınma hedeflerine ulaşma potansiyeline ilişkin değerli bilgiler sunmakta ve gelişmekte olan bu alandaki artan bilgi birikimine katkıda bulunmaktadır. Çalışma, Sıfır Açlık BM SKH 2 hedefinin gerçekleştirilmesine yönelik adımlar olarak Politika Desteğinin Güçlendirilmesini, Kaynaklara Erişimi ve kapasite geliştirmeyi önermektedir.

Anahtar Kelimeler: Tarımsal girişimcilik, gıda güvencesi, Sıfır Açlık, strateji, BM sürdürülebilir kalkınma hedefleri, Nijerya

INTRODUCTION

This research delves into the potential of agropreneurship as a strategic pathway to achieving the United Nations' Sustainable Development Goal 2, which aims for Zero Hunger. Focusing specifically on the Nigerian context, the study acknowledges the critical role of both agriculture and entrepreneurial innovation in fostering food security and economic development within the nation. By examining the intersection of these two domains, the research seeks to understand how the entrepreneurial application of skills and resources within the agricultural sector can contribute to alleviating hunger and promoting sustainable food systems in Nigeria. This investigation is particularly timely given the global emphasis on sustainable development and the recognized importance of agriculture in addressing food security challenges.

The pursuit of global food security has placed renewed emphasis on the agricultural sector's transformative potential, particularly in the context of the United Nations' Sustainable Development Goal 2: Zero Hunger (UNDP, 2020). In Nigeria, where agriculture remains a significant economic pillar (Chukwuka & Imide, 2023), innovative approaches are crucial for addressing persistent food security challenges. This research investigates agropreneurship – the entrepreneurial application of creative skills within the agricultural sector (Chukwuka, 2016) – as a strategic pathway towards achieving Zero Hunger. By focusing on the Nigerian context, this study aims to understand how the dynamism and innovation inherent in agropreneurial activities can contribute to fostering food security and building sustainable agricultural systems, thereby directly addressing SDG 2.

The Nigerian government has recently injected a new image on agriculture and the agro-based sector, in which it has spurred the return of interest in this sector, in light of the recent focus on sustainable development (Selamat & Nasir, 2013). Because of the global concern over food security and climate change, agropreneurship, which has aided in the expansion of agribusiness, has drawn significant attention from multilateral organizations, policy makers, and civil society (Food and Agriculture Organization of the United Nations, 2012). In most developing countries, agriculture is regarded as the second economic pillar in the country, after crude oil (Maponya, Netswera, Tshikovhi, 2024). However, entrepreneurship is recognized as one of the finest approaches to a nation's economic development and progress, and it is a helpful instrument to maintain the nation's competitiveness in the increasingly globalized world of today. By generating employment possibilities and starting innovations that result in technological advancement and increased production, it indirectly promotes political and social stability (Ahmad, et al. 2010). The idea of "agropreneurship," a new and exciting facet of the agriculture industry, was thus created through the merger of both. The agricultural sector needs agropreneurship to change since it creates new economic opportunities for the nation (Alsos, 2011) and increases agropreneurs' incomes (McElwee, Smith, & Sommerville, 2011). Agropreneurship is the term used to describe farmers who engage in business, with the idea being that sustainable agropreneurship may be used to improve agriculture in rural regions (Bairwa et al., 2014). According to Alsos et al. (2011), new economic development for rural areas is a necessary component of entrepreneurship enhancement in agriculture. To maintain an ecosystem of businesses, agropreneurs must innovate, manage risk, and optimize financial gain in the face of current market competition. Prior research has highlighted the need of an efficient training program in fostering competitiveness, knowledge, and skills necessary to maintain entrepreneurship. In an attempt to modernize agriculture, the idea of agropreneurship is being promoted to stimulate the establishment of businesses associated with the farming industry. According to Singh (2013), the term "entrepreneurship" originally referred to enterprising people who advance economic advancement by coming up with novel and efficient methods of completing tasks. The pursuit of innovation and innovative means to launch successful businesses is also connected to entrepreneurship.

The concept of agropreneurship

Agropreneurship refers to starting a business that uses innovative aspects in the agriculture industry. Agropreneurship, as defined by Almad & Muda (2013), is agriculture that is directly marketed, community-focused, and sustainable. On the other hand, Ahmed, Hasan, and Haneef (2010) defined the idea as an employment strategy that can help rural residents become financially independent. Furthermore, agropreneurship was defined by Aleke et al. (2011) as a self-employment venture that aims to generate wealth in the agricultural sector. According to Bairwa et al. (2014), a more current definition of agropreneurship is the lucrative union of entrepreneurship and agriculture that transforms a farm into an agribusiness firm in the agriculture and related industries. The current study defines agropreneurship as agricultural entrepreneurship activities that are controlled to produce, distribute, market, or transport agricultural products in order to create income, taking into account the many meanings that have been given to the term. Agropreneurship is viewed as a process that advances the development of the person as well as the nation. Agropreneurship at the individual level helps people perform better because it lowers poverty levels by generating

employment opportunities and gives people the freedom to be creative and inventive in order to satisfy customer demands (Bairwa et al., 2014). Additionally, agropreneurship reveals the vibrant aspects of those who work to advance agriculture by carrying out diverse tasks with a variety of resources financial, human, physical, and informational in order to achieve a certain objective (Cardon & Kirk, 2015). Therefore, in order to succeed as a player in the competitive agropreneurship market, agropreneurs can enhance their skills and become more competent, creative, and innovative through new and modern agriculture and agropreneurship. Similar to this, agropreneurship at the national level can increase economic viability (Osikabor et al., 2011) and turn agriculture into a more alluring and lucrative business that can significantly increase the nation's income by directly employing and paying a sizable and vulnerable segment of the population (Bairwa et al., 2014).

In actuality, agropreneurship is a means of bringing underdeveloped nations into the developed world. According to Dess et al. (2015), agropreneurship has the power to address issues facing the "entire" nation. The nation is genuinely on its way to reducing the burden of agriculture through the promotion and development of agropreneurship. This is achieved through programs that support industrial development in rural areas, reduce pressure on urban cities, control migration from rural to urban areas, increase national income, and provide employment opportunities for youth in rural areas (Dess et al, 2015).

Entrepreneurship in agriculture

It's important to take advantage of the chances to encourage entrepreneurship in agriculture in order to address the current issues with agricultural productivity and profitability, given the rising rates of unemployment in rural regions and the agricultural sector's sluggish growth (UNDP 2012). A person or organization with the authority to use or exploit land or other associated resources needed to conduct mixed, agricultural, or forestry operations is referred to as a "agricultural entrepreneur"(Entrialgo & Iglesias 2016). Agri-entrepreneurs are, to put it simply, "people who are developing the employment using agriculture as a business." Nigeria is a country where a significant portion of the labor force is employed in agriculture. As a result, increasing agricultural incomes are required to spur economic growth across the board, including in non-farm sectors that engage in commerce with and sell to people living in rural areas. Therefore, the potential of agriculture to increase overall GDP and its proportional value in reducing poverty would differ between countries. The bulk of Africa's impoverished and food insecure people reside in rural regions and rely mostly on agriculture for their livelihoods. Investment in small-scale agriculture needs to be a top priority for the government and business sector. The importance of agriculture in the majority of African economies and the methods intended to foster the early stages of economic growth cannot be ignored in the quest to reduce poverty and boost food production in the continent. The unrealized potential of a sustainable rural economy development is to boost employment rates in rural areas, prevent premature rural-urban migration, lower the rate of population growth and overcrowding in urban areas, and, most importantly, alleviate poverty at its source (Swatson, Alabi, Naidoo, Cooposamy, and Arthur, 2024).

Nigeria is a large agricultural nation with an abundance of natural resources, including 68 million hectares of arable land, roughly 12 million hectares of freshwater, 960 km of coastline, and a variety of ecosystems that allow the nation to produce a wide range of livestock, agricultural, and fisheries products. 8. Over 70% of Nigeria's impoverished population lives in rural villages, which are the epicenter of the country's poverty. Rural areas' development indicators are far behind those of urban areas: incomes are lower, life expectancy is shorter, infant mortality rates are generally higher, illiteracy is more prevalent, malnutrition is more common, and a larger percentage of people lack access to basic infrastructure and amenities for daily life (Maponya, Netswera, Tshikovhi, 2024).

The state of agriculture in Nigerian economy

In Nigeria, efforts to discover speedier and simpler ways to accomplish economic growth and the reduction of poverty have neglected agriculture and agricultural productivity. According to the International Development Association in 2009, agriculture is the most relevant production sector in the majority of third-world countries in terms of its share of GDP and the amount of jobs it generates. It also plays a significant role in the global goal of reducing poverty. In Nigeria and throughout Africa, the vast majority of the underprivileged, undernourished, and food insecure people reside and work in rural areas (Chukwuka & Imide 2023). The irony lies in the fact that rural communities possess the necessary land capital to initiate agriculture, which they do. However, they lack the financial resources and technical expertise to establish a business that could have a positive impact on the economy by lowering poverty and creating jobs (Swatson, Alabi, Naidoo, Cooposamy, and Arthur, 2024). Nigeria's economic goals have always been to improve the country's economic pillars and lessen its reliance on crude oil by modifying the way resources are produced and used. This will set the country up for long-term, stable, inflation-free growth. Because of this, the

real gross domestic product (GDP) has been growing rapidly, which is a significant indicator of economic activity, but the need for many areas of the economy to be transformed has become even more crucial (World Bank 2020). This aligns with the growth aspirations of almost all emerging nations, since growth is anticipated to bring about changes in the nation's economic structure.

Nigeria has had consecutive government since gaining independence in 1960, but there hasn't been much progress in changing the country's economic structure. The existence and use of primary products and natural resources have fueled the rate of development. When the agricultural sector was first determined to be feasible and motivated by the desire to produce food and cash crops, it was at the forefront of the development process and contributed 54.7% of the GDP in the 1960s (World Bank 2020).

The extent of the government's or ruling body's disregard for the rural economy is demonstrated by the height of rural poverty in Nigeria. 75% of the world's impoverished and destitute live in rural areas, having no other means of subsistence beyond farming and other forms of agriculture for the majority of people. As a result, agriculture is crucial to global economic expansion, the reduction of poverty, and environmental sustainability. Regarding poverty, there is a general consensus that it is a rural phenomenon.

Sustainability Development Goals of the United Nations

The Goal two (2) of the United Nations Department of Economic and Social Affairs Sustainable Development is to end hunger, achieve food security and improved nutrition and promotes sustainable Agriculture. Better food access and the broad promotion of sustainable agriculture are necessary to achieve this goal. This means boosting small-scale farmers' productivity and incomes through equitable access to land, markets, technology, and sustainable food production systems, as well as resilient agricultural practices (UNDP 2020).

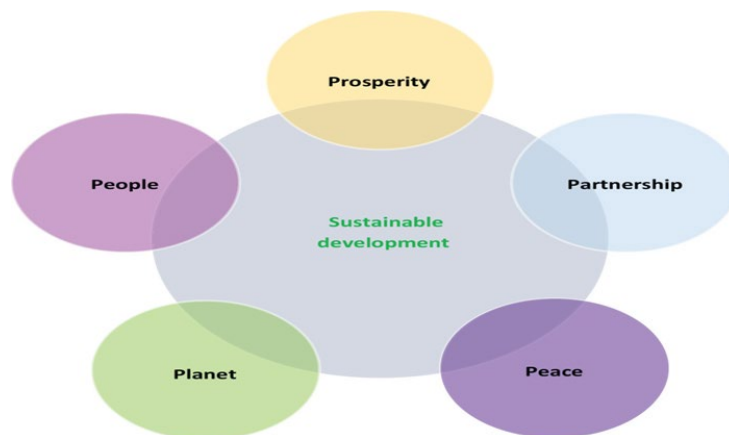


Fig. 1. The 5Ps (people's well-being; planet with protection of the earth's ecosystems; prosperity with eradication of poverty and inequality; peace, and international partnerships) of sustainable development.

Source: World Health Organization. Health in 2015: from MDGs, millennium development goals to SDGs, Sustainable Development Goals. 2015. Available from: <https://apps.who.int/iris/handle/10665/200009>

In many nations, food insecurity and undernutrition persist as major issues despite several efforts to reduce world hunger. Achieving food security is a top priority in developing countries around the world, where threats to food security often stem from population growth combined with intensified natural events like floods, droughts, extreme temperature fluctuations, or rainfall. This is true regardless of political systems or socioeconomic conditions. Furthermore, increasing food costs and economic inequality may have a negative impact on impoverished households' access to and availability of food due to increased food demand and decreased crop output (Nesterenko, N., Smirnov, S., & Yaburova, 2024). It should be mentioned that the primary causes of hunger and malnutrition are thought to be poverty, war and conflict, natural catastrophes, climate change, and population expansion. Porkka et al. noted that feeding the world's population is a challenge that is likely to get even more serious in the future. The Food and Agriculture Organization of the United Nations (FAO) reports that 13% of people living in developing countries suffer from undernourishment (UNDP 2020). With a forecasted growth in food demand of 59%–102%, the world's population is expected to surpass 7.6 billion in 2018 and reach 9.2 billion by 2050. In order to increase food availability and achieve food security, the agricultural sector is strategically important. While there is consensus that there will be a greater need for food globally in the ensuing decades, there is disagreement about whether global agriculture will be

able to meet this demand by increasing the amount of food available. One potential strategy to end hunger appears to be ensuring better food supply through raising agricultural production and diversifying the uses of agricultural land. Nevertheless, low-income developing nations will not be able to produce all the food required in 2020 and beyond with the knowledge and technology currently available to them.

MATERIALS AND METHODS

The Paper adopted a descriptive survey method which allows the use of quantitative approach to the primary data gathering of 200 Agropreneurship employees in Delta through the use of Likert scale questionnaire. A study population of 200 Agropreneurship employees in Delta was arbitrarily selected. The researcher printed and distributed 133 questionnaires, but only 120 were perfectly answered and returned which is about 90% return rate and this was used for the study. Consequently, the responses of the 120 questionnaires were subject to different statistical analysis and results presented in table formats and percentage for easy understanding. Research question and test of hypothesis was analyzed using multiple regression and correlation approach using SPSS version 20.

RESULTS AND DISCUSSIONS

Utilizing frequency, percentage, and mean inferential statistics, the study's data were statistically examined. The cut-off point for the Likert scale's mean was set at 2.50, making it simple to ascertain whether a particular opinion was shared by the respondents or not on the subject of unemployment and the perception of business as a means of job creation.

Analysis of research questions

Department “A”: personnel data of respondents

Table 1. Age distribution of respondents

Age	No. of Respondents	Percentage (%)
18-28yrs	35	29.16
28-38yrs	42	35
38-48yrs	23	19.17
48-58yrs	20	16.67
Total	120	100

Source: Field Survey, 2024

The age distribution table in this instance shows that the age range of 18 to 28 years was represented by 35 respondents, or 29.16%, the age range of 28 to 38 years by 42 respondents, or 35%, the age range of 38 to 48 years by 23 individuals, or 19.17%, and the age range of 49 years and older by 20 respondents, or 16.67%. This is a statistical presentation and analysis of the data included in the age distribution table.

Table 2. Academic qualification of respondents

Academic Qualification	No of Respondents	Percentage%
SSCE	40	33.33
NCE/OND	30	25
HND/B.SC	35	29.17
MSC	15	12.5
PhD	-	-
Total	120	100

Source: Field Survey, 2024

Upon the demonstration of data analysis, it is an honest information that 40 respondents were holders of SSCE certificate, representing 33.3%, NCE/OND pulled respondents, which represent 25%, HND/BSC has 35 respondents, which scores 29.17% while MSC certificate holders were 15, which is a representation of 12.5% whereas PhD certificate, could not produce any respondent and percentage. The table shows the statistical result of academic qualification distribution table of the study.

Analysis of research questions

Department “B”:

Research Question 1: What is the nature of relationship between Agropreneurship and achieving the UN Sustainability Development Goal 2- Zero Hunger?

Research question one was answered with questionnaire item 1,2,3,4

Table 3. The Nature of relationship between Agropreneurship and achieving the UN sustainability Development Goal 2-Zero Hunger

S/N	ITEMS OF THE QUESTIONS	SA	A	SD	D	UND	Mean	Remark
1	Agricultural Entrepreneurship to a great extent is a strategy to achieving UN sustainable Development Goal 2-Zero Hunger.	45 (37.5)	40 (33.33)	10 (8.33)	20 (16.67)	5 (4.17)	3.76	Sign
2	Agropreneurs activities and attitudes have a positive relationship with UN Sustainability Development Goals	50 (41.67)	33 (27.5)	17 (14.17)	9 (7.5)	11 (9.16)	3.75	Sign
3	Agropreneurship is the most potent strategy for achieving Sustainable Development Goal 2-Zero Hunger	17 (14.17)	50 (41.67)	33 (27.5)	11 (9.16)	9 (7.5)	3.05	Sign
4	Agropreneurship activities will lead to Zero Hunger through food security	30 (25)	25 (20.83)	10 (8.33)	30 (25)	25 (20.83)	3.29	Sign

Note: Figures in parenthesis are percentages: (SA = Strongly Agree; A = Agree; D = Disagree; SD = Strongly Disagreed and UND = Undecided)

Source: Field survey 2024

According to Table 3, 37.5% of respondents strongly concurred with item 1, 33% agreed, 8.3% strongly objected, 16.7% disagreed, and 4% were unsure. The average answer, 3, 76, suggests that the respondents agreed with the concept completely. According to item 2, there were 41.6% who highly concurred, 27.5% who agreed, 14% who strongly disagreed, 7.5% who disagreed, and 9.1% who were unsure. The significant mean answer of 3, 75 suggest that respondents fully concurred with the concept.

In item 3, the result show that 14.17% strongly agreed, 41.6% agreed 27.5% strongly disagreed, 9.2% disagreed and 7.5% where undecided. The mean response of 3, 05 is significant and implies that the respondents totally agreed with the construct.

In item 4, the result show that 25 % strongly agreed, 20.8% agreed 8.3% strongly disagreed, 25 % disagreed and 20.8% where undecided. The mean response of 3.29 is significant and implies that the respondents totally agreed with the construct.

From the general response it is clear that all response is above 2.5 cutoff and hence respondents agreed that there is significant relationship between Agropreneurship and UN Sustainability Development Goal 2-Zero.

Testing of hypothesis

The hypothesis formulated in chapter one will be tested using the collected data from field survey. Three hypotheses were set to guide this study. Hypothesis testing will be carried out in the order below: restatement of hypothesis, result of analysis, comparing result with decision rule, validating the hypothesis to accept or reject.

Statement of hypothesis

i. Test of Hypothesis One: H1: There is significant relationship between Agropreneurship and achieving the UN Sustainability Development Goal 2-Zero Hunger.

In testing the above hypothesis we use the result of simple linear regression between Agropreneurship and achieving the UN sustainability Development Goal 2-Zero Hunger.

Table 4. To ascertain the extent of relationship between Agropreneurship and UN Sustainability Development Goal 2-Zero Hunger

Model Summary						
Model		R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1		.990 ^a	.980	.979	.55833	1.344
a. Predictors: (Constant), X4, X2, X3, X1						
b. Dependent Variable: UN Sustainable Development Goal 2-Zero Hunger						
ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1713.317	4	428.329	1374.005	.000 ^b
	Residual	35.850	115	.312		
	Total	1749.167	119			
a. Dependent Variable: UN Sustainable Development Goal 2-Zero Hunger						
b. Predictors: (Constant), X4, X2, X3, X1						
Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta	T	
1	(Constant)	.688	.164		4.192	.000
	X1	1.330	.154	.463	8.618	.000
	X2	.906	.136	.337	6.641	.000
	X3	.044	.094	.017	.474	.636
	X4	.570	.107	.195	5.336	.000
a. Dependent Variable: UN Sustainable Development Goal 2-Zero Hunger						

Source: SPSS Result output (Version 20)

The analysis's findings showed that there is a significant ($P0.0000.05$) connection between Agropreneurship and UN Sustainable Development Goal 2-Zero Hunger R is 0.990, R^2 is 0.980, modified R^2 is 0.979, p -value 0.000, and F -stat. 1374.00 are all taken from the model report. The findings showed that Agropreneurship account for 98% of the variation in UN Sustainable Development Goal 2-Zero Hunger ($R^2 = 0.980$). With the exception of item 3 (the escalating rate of Agropreneurship), all of these include items and constructs for Agropreneurship are significant and favorably signed ($P0.635 > 0.05, 0.044$).

The dependent variable (UN Sustainable Development Goal 2-Zero Hunger) and the independent variables (Agricultural Entrepreneurship etc. P 0.0000.05, 1.330, P 0.0000.05, 0.905, and P 0.0000.05, 0.057) have a strong relationship based on the estimated parameters.

Applying the decision rule, we deny the null hypothesis that there is no significant relationship between Agropreneurship and UN Sustainable Development Goal 2-Zero Hunger and accept the alternative because the p -Value of our regression result is 0.0000.05. The alternative theory, according to which there is a beneficial and noteworthy connection between Agropreneurship and UN Sustainable Development Goal 2-Zero Hunger, is one we can embrace.

Discussion of results

The study's findings strongly suggest a significant and positive relationship between agropreneurship and the achievement of UN Sustainable Development Goal 2 (SDG 2) – Zero Hunger – within the Nigerian context. The statistical analysis reveals a highly significant connection ($p < 0.05$), with a very strong correlation coefficient ($R = 0.990$). The coefficient of determination ($R^2 = 0.980$) indicates that a substantial 98% of the variation in achieving Zero Hunger can be explained by agropreneurship. This is further supported by the adjusted R^2 of 0.979, which accounts for the number of predictors in the model. The highly significant F -statistic (1374.00, $p = 0.000$) further reinforces the overall significance of the regression model.

The study highlights that most aspects of agropreneurship have a significant and positive influence on achieving Zero Hunger. The estimated parameters for the independent variables related to agropreneurship are statistically significant ($p < 0.05$) and positively signed, indicating that an increase in these aspects of agropreneurship is associated with progress towards Zero Hunger. The exception noted is "the escalating rate of Agropreneurship" (item 3), which was not significant ($p > 0.05$). This might suggest that simply an increase in the number of agropreneurs alone, without considering the quality, sustainability, or impact of their ventures, may not automatically translate to the desired outcome of Zero Hunger.

The decision to reject the null hypothesis (no significant relationship) and accept the alternative hypothesis (a positive and significant relationship) is well-supported by the p -value of 0.000, which is considerably less than the conventional significance level of 0.05.

The study's outcome indicates that agropreneurship is a potent strategy for achieving SDG 2 in Nigeria aligns with the empirical findings presented. The assertion that agropreneurs, their activities, and attitudes have a significant positive relationship with achieving the SDGs, and specifically that agropreneurship is the most potent strategy for Zero Hunger, is strongly backed by the high R^2 value. Finally, the confirmation that agropreneurship activities will lead to Zero Hunger through food security directly addresses the core of SDG 2.

These findings is theoretically grounded in the Resource-Based View (RBV) of the firm (Barney, 1991). The RBV suggests that firms can gain a competitive advantage by leveraging their unique, valuable, rare, inimitable, and non-substitutable (VRIN) resources. In the context of agropreneurship and SDG 2, the skills, innovations, and market-oriented approaches of agropreneurs can be considered as valuable resources. When these resources are effectively utilized, they can lead to increased agricultural productivity, better market access for farmers, reduced food waste, and ultimately contribute to food security and the achievement of Zero Hunger. The study's findings suggest that the "resources" embedded within agropreneurial activities in Nigeria are significantly contributing to the goal of Zero Hunger.

Furthermore, the findings resonate with Innovation Theory, particularly Schumpeter's (1934) emphasis on the role of entrepreneurs in driving economic development through innovation. Agropreneurs often introduce new technologies, farming techniques, and business models that can enhance agricultural efficiency and food availability, directly addressing the challenges of hunger. The study's implication that agropreneurship is a potent strategy underscores the innovative capacity that entrepreneurs bring to the agricultural sector, thereby fostering progress towards SDG 2.

To further support this discussion, existing literature attempts to link entrepreneurship in agriculture to food security. For instance, studies have shown that entrepreneurial activities in agriculture can lead to increased farm income and productivity, which are crucial for food security at the household and national levels (e.g., Sumberg & Okali, 2005). Similarly, Agropreneurs often play a vital role in linking smallholder farmers to markets, improving their access to inputs and information, and thereby enhancing food supply chains (Tracey & Jarvis, 2007).

Summarily, the research findings convincingly demonstrate a strong, positive, and statistically significant relationship between agropreneurship and the achievement of SDG 2-Zero Hunger in Nigeria. This aligns with theoretical frameworks like the Resource-Based View and Innovation Theory, which highlight the role of entrepreneurial resources and innovation in driving economic and social progress. While the study itself is the primary empirical evidence presented, broader literature on agricultural entrepreneurship and food security would further enrich this discussion. The study's conclusion that agropreneurship is a potent strategy for achieving Zero Hunger in the Nigerian context is well-supported by the statistical outcomes.

Implications of the findings

The strong positive relationship identified between agropreneurship and achieving Zero Hunger has several practical implications:

- i. **Policy Focus:** Governments and policymakers should recognize and actively support agropreneurship as a key strategy for achieving SDG 2. This could involve creating enabling environments through supportive policies, access to finance, infrastructure development in rural areas, and reducing bureaucratic hurdles for agricultural businesses.
- ii. **Investment in Agropreneurs:** Development organizations, financial institutions, and impact investors should prioritize investments in agropreneurs. This includes providing access to capital, training, mentorship, and technology to enhance their capacity and the sustainability of their ventures.
- iii. **Educational and Training Programs:** The findings underscore the need for robust educational and training programs focused on agropreneurship. These programs can equip individuals with the necessary skills in agricultural production, business management, marketing, and innovation to succeed as agropreneurs.
- iv. **Value Chain Development:** Supporting agropreneurs can lead to the development of more efficient and resilient agricultural value chains, from production to consumption, thereby improving food availability, affordability, and quality, which are crucial for achieving Zero Hunger.

v. Rural Development: Promoting agropreneurship can stimulate economic growth in rural areas, create employment opportunities, and reduce rural-urban migration, indirectly contributing to food security by improving livelihoods in agricultural communities.

CONCLUSIONS

This study has compellingly demonstrated the significant and positive nexus between agropreneurship and the attainment of UN Sustainable Development Goal 2: Zero Hunger, within the Nigerian context. Through rigorous empirical analysis of data from agropreneurship employees in Delta State, the findings robustly affirm that fostering entrepreneurial activities within the agricultural sector is not merely a supplementary approach, but a potent and pivotal strategy for ensuring food security and ultimately eradicating hunger. The substantial explanatory power of agropreneurship on Zero Hunger, accounting for a remarkable 98% of the variation, underscores its critical role.

While the overall impact of agropreneurship on Zero Hunger is overwhelmingly positive, a key nuance emerges from the finding that simply increasing the number of agropreneurs does not, in itself, guarantee progress. This suggests that the effectiveness, long-term viability, and real-world impact of agropreneurial endeavors in agriculture are more critical drivers of food security than just the quantity of such ventures. Therefore, efforts to promote agropreneurship should prioritize the quality and sustainability of these initiatives to maximize their contribution towards achieving Zero Hunger.

Ultimately, this research provides a strong empirical basis for recognizing and prioritizing agropreneurship as a cornerstone in Nigeria's pursuit of food security and its commitment to the global agenda of Zero Hunger. By strategically supporting and nurturing agropreneurs through targeted policies, investments, and capacity-building initiatives, Nigeria can unlock the transformative potential of its agricultural sector, paving the way for a future where hunger is eradicated and sustainable food systems thrive. The path to Zero Hunger in Nigeria, as illuminated by this study, is undeniably intertwined with the flourishing of agropreneurship.

RECOMMENDATIONS

Drawing from the conclusions and practical implications, the following recommendations are hereby proposed to relevant government authorities and other stakeholders:

i. Strengthen Policy Support and Access to Resources: The Nigerian government should formulate and implement policies that specifically support the growth and development of agropreneurship. This includes providing financial incentives, access to land, a conducive regulatory framework, access to other critical resources such as finance (loans, grants), technology, information, and markets.

ii. Invest in Capacity Building: Implement comprehensive training and educational programs to develop the entrepreneurial and agricultural skills of individuals interested in or already engaged in agropreneurship.

iii. Promote Collaboration and Networking: Foster linkages between agropreneurs, research institutions, government agencies, and the private sector to facilitate knowledge sharing, innovation, and market access.

iv. Focus on Quality and Impact: While encouraging participation in agropreneurship, emphasis should be placed on supporting ventures that are sustainable, innovative, and have a direct positive impact on food security and the broader agricultural sector, rather than solely focusing on the number of agropreneurs.

By implementing these recommendations, Nigeria can leverage the potential of agropreneurship to make significant strides in achieving UN Sustainable Development Goal 2-Zero Hunger.

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