

# Entrepreneurship Standards, Sustainability and Socio-Economic Welfare of Entrepreneurs in North Central Nigeria.

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## ABSTRACT

The concept of sustainable entrepreneurship via entrepreneurs' socio-economic welfare is an approach to understand the tie between entrepreneurship standard, successful entrepreneurship and entrepreneurs' welfare. A successful entrepreneurship is determined by a good, effective and efficient entrepreneurship standard. This study therefore examined the entrepreneurship standard in the North Central Nigeria and its effect on the welfare of entrepreneurs in the region. The field survey was conducted on a sample of 383 respondents drawn from 9 local government areas across three senatorial districts of the selected states: Plateau, Nasarawa and Benue states. A stratified sampling method and snow ball sampling technique were used in sampling entrepreneurs from their various fields of businesses. Ordered logistic regression was used to analyze the responses from 383 questionnaires with a satisfactory response rate of about 80 percent. The study revealed that entrepreneurship impact on the entrepreneurs' welfare remains constrained by skill deficiencies and structural challenges. Also, that the interplay between business competencies and welfare outcomes demonstrates that strategic management, financial literacy, and human resource capabilities are pivotal in fostering sustainable enterprises. The study therefore recommended that improving financial literacy, digital proficiency, and strategic marketing capabilities. Training programmes, particularly in financial planning and human resource management, will be essential in fostering sustainable business growth.

## INTRODUCTION

The importance of entrepreneurship for achieving socio-economic welfare for entrepreneurs is widely recognised by the government policy makers, NGOs and economists in the African continent. This could be because the economic expansion of these continent is yet to adequately provide for the socio-economic needs of the continent. Among the cardinal objectives of Nigerian government in entrepreneurship development is job creation for employment generation, poverty eradication and general well-being of its citizenry and the economy as a whole (NERGP 2017) and a good entrepreneurship standard in literature has helped to active these objectives (Abah and Abah 2023). Entrepreneurship for economic development (social welfare), deals with economic productivity that enhances the lives of the ordinary people (McMullen 2011), a development that is not just the structure build of the nation, but is about creating an environment in which people can develop their full potentials, through creative, and productivity to cater for their needs and interest.

According to Nunes (2023), Entrepreneur are economic transformation agents that are supposed to transform the society into its visible employment generation, and wealth creation society, such that indigenous entrepreneurial culture is generally stimulated in the society. An explanation as to why it may be easy to see the advantages of entrepreneurship as a social economic welfare is in the local and regional activities which create a direct impact on the community-based socioeconomic welfare. This is the reason why the entrepreneurship in Nigeria must imbibe the right entrepreneurship standard.

The Global Entrepreneurship Monitor (GEM, 2022) reported that the united Arab Emirate, the Netherlands, and

Finland are ranked at the top of the list of the best countries in entrepreneurship standard among fifty countries worldwide and the high standard development has resulted in generation of great wealth and more sustainably, expand employment, reduction of migration flows and encouraged immigration and foreign investments.

According to Entrepreneurship and structural transformation Foresight Africa (ESTFA, 2024), Africa boasts of the world's highest growing rates of entrepreneurship, with more than 1 working-age Africans starting a new business and more than three-quarters of the youth planning to start one within five years. Also, in 2022, Nigeria had an entrepreneurial index score of 0.58 out of 1.0 (FATE Foundation institute, (FFI, 2022), implying a slightly better than average performance on entrepreneurship development in Africa. Across the five pillars of entrepreneurship, the best performing was perception of entrepreneurship opportunities with an index score of 0.80 out of 1.0 was accorded to Nigerians (FFI, 2022). Yet the standard of entrepreneurship in the continent is low compared to Americans and Asian continents (Neumann, 2021).

A sustainable entrepreneurial standard, as theorized by Schumpeter (1934) states that Entrepreneurs in every economy must launch a new product or new species, apply new methods of production, open new markets, and acquire new sources of supply of raw material living the old one obsolete. He viewed this discontinued change in the economy as the fundamental for sustainable entrepreneurial development which leads to economic development. These entrepreneurship standards according to National Content Standards for entrepreneurship (CTE, 2024) can be expressed in; entrepreneurial Discovery, Concept Development, Resourcing, Human Resource Management, Communications and Interpersonal Skill, Digital Skills, Professional Development, Information Management, Marketing Management, Operations Management, Risk Management and Strategic Management

Faced with the numerous macro-economic problems in Nigeria and in North Central in particular, such as high unemployment, high level of poverty and slow economic growth rate, decrease in the share of labour force in industrial sector, change in the structure output, this study sought to assess the effect of entrepreneurial standard in the study area and how it has affected the social welfare of the entrepreneurs in the region. The rest of the paper consists of literature review, methodology, finding, summary, conclusion and recommendation.

## **LITERATURE REVIEW AND THEORETICAL LITERATURE**

### **Conceptual Clarification**

#### **Concept of Entrepreneurship**

Entrepreneurship, as evidenced from literature has no precise definition. A number of authors have presented different definitions of entrepreneurship since after the first idea of entrepreneurship which was formulated and presented by Centillion in the middle of the 18th century. Marshall (1964), an early Neo-classical economics, defines entrepreneurship as a method and technique of combining and converting factors of production into a finished product. For Schumpeter (1934), it is an innovative price of creative distraction. Academic definition declares entrepreneurship as a study of an act of how businesses are funded and managed for economic development.

This study therefore, conceptualizing from these definitions, sees entrepreneurship as an act of identifying and exploiting opportunities, through a continuous creation of initiative and innovation, under condition of risk and uncertainty, to either create or reorganizing the existing resources capable of generating employment for sustainable economic development and for the welfare of the entrepreneurs and the society at large. Therefore, to be classified as an entrepreneur or an entrepreneurial firm, the person or the firm must show a potential of for growth through progressive initiatives and innovation, introducing new production process, new product and new marketing strategies; an obvious avenue for productivity in the economy and the citizenry welfare.

#### **Concept of Entrepreneurial Standards**

Standard as an English word refers to an agreed mode of doing something which can be in any forms and method.

Entrepreneurship standard could be seen as a distinguishing ways of business operation management by the distilled wisdom of managers expertise in their business dealings with the sole aim of providing for the needs of the organization and the organization connections. Entrepreneurship standards according to CTE (2024), is an accepted measure of the reliability of materials, products methods and services, people use every day to ensure product functionality and compatibility, facilitate interoperability between systems and device and support consumer' safety and public welfare. The standards are found in the business creativity, risk-taking, innovation, achievement-orientation, ambition and independence (Capital, 2024).

### **Concept of Entrepreneurial Sustainable Development**

Sustainability according to Civitillo (2023) is a way of life that creates the best possible settings of life for everyone without exception at all time. It is the model that ensures that in dealing with today, future must be preserved. According to Ibeenwo (2018), sustainable entrepreneurship, on the other hand, is the process of identifying, evaluating, and seizing opportunities that lesson a business's impact on the natural environment while also benefiting the broader society and local environment. Sustainable entrepreneurial development is a process whereby exhaustible resources should be utilized for development in such a way that it fulfills the needs of the present generation without disturbing its capacity to meet needs of future generation (Agu & Onah, 2021). To this study therefore, entrepreneurship sustainability as a practice is that, that supports long-term entrepreneurship growth which positively impacting on socio-economic and the general well-being of the entrepreneurs and society in general.

### **Entrepreneurial Social Welfare**

Study.com (2024) defines social welfare as various local state and government programs designed to assist low-income people with food, housing and medical care. For the entrepreneurs, this welfare is attained from a successful and a sustainable entrepreneurial business. To this study therefore, social welfare means the collective welfare of the entrepreneurs of the society and the ongoing responsibility on the improvement of their lives. This means, the elevation of the quality of entrepreneurs' lives in all its dimensions and exploring the type of resources needed to enhance their lives. These include the proficiency, indisposition, sustenance, edification of the entrepreneurs and their household.

### **Theoretical Literature and Framework**

This study is guided by Schumpeter (1934) innovation theory. The theory states that entrepreneurship is a historical process of structural changes, substantially driven by innovation which is divided into four standards. According to him an innovator/entrepreneur must be able to lunch a new product or new species product, apply new methods of production or sales of product not yet proven in the industry, open new markets, acquire new sources of supply of raw material or semi-finished goods. He viewed these obsolete changes in the entrepreneurial activities as the as a standard for economic growth and development in the economy.

An important note to the theory is that Schumpeter recognized that the macroeconomic impact of these standards is not instant but a gradual process which matures in a business norm and values. He showed that by dividing innovation standards into four parts; lunch a new product or new species product; implies that entrepreneurs must display his unique trait and behaviours and utilize his skill which is prerequisites to the new inventions and productivity and at large welfare. Apply new methods of production or sales of product not yet proven in the industry, implies that the entrepreneurs must recognize opportunities, generates ideas and determine the feasibility of ideas, markets and ventures. open new markets, acquire new sources of supply of raw, implies the standard in the entrepreneurial process where the entrepreneur plans the entrepreneurial ventures, identify the needed resources, strategies and acquires the financial, human, and capital resource and utilizes all the resources to actualize his goal and objectives.

The strength of this theory to the study is that, although entrepreneurs of interest to this study are survival, necessary-oriented entrepreneurship, going by the Schumpeter's innovation process of slow and steady structural changes in the economy, a dynamic and well-coordinated necessity entrepreneurship in a long run may be able

to bring about sustainable structural changes and economic welfare of the entrepreneurs if the entrepreneurship standard is right. Secondly, since entrepreneur or innovator is the key figure in Schumpeter's economic development, it is our believe that necessity entrepreneurs are capable of initiating sustainable entrepreneurial development in the region and carrying it forward, would not just be managers of business activities for subsistence, but would act as facilitator of sustainable entrepreneurship development especially in the rural setting.

### **Empirical Review.**

Many studies on entrepreneurship had attributed entrepreneurship standard to sustainable entrepreneurship development (Schumpeter 1934), others argued that entrepreneurial standard increase entrepreneurial development lead economic growth and entrepreneurs' welfare. For instance, Ezeiofor and Ezekwesilis (2022), studied the relationship between sustainable entrepreneurship and sustainable economic development. Using survey design and five-point Likert's scale and Pearson correlated confident to test the hypothesis, the study found out that sustainable entrepreneurship has a strong link to long-term economic growth and development. In line with Ezeiofor and Ezekwesilis (2022), Olateiu, Danmola, and Aminu (2020), and Ajayie and Adeshina (2023) using content analysis to study sustainable entrepreneurial development and sustainable development in Nigeria; Prospect and challenges and sustainable entrepreneurship and innovation respectively. They found out that sustainable entrepreneurship is linked with sustainability in terms of economic, social and environment welfare and they advised that the entrepreneurs should go green on their businesses.

On the importance of substantiable entrepreneurship development, Ajayie and Adeshina, (2023) and Dhaliwal (2016), studied sustainable entrepreneurship and innovation in Nigeria: prospect and challenges and the role of entrepreneurship development, with the aim of ascertaining the effect of entrepreneurship in Nigeria. using contextual analysis, they found out that entrepreneurship creates jobs that facilitate personal development as well as growth in economic productivity and declared that entrepreneurship is the catalyst of economic growth and development. therefore, recommended entrepreneurship should be held in high esteem for the economy transformation, through research and development, policy reforms, capacity building and policy-private partnership.

A plethora of researches such as Neumann (2021), Meitriana et al (2019), have researched on sustainable entrepreneurship and socio-economic welfare of the entrepreneurs and many attested that sustainable entrepreneurship has helped to reduce poverty in the lives of the entrepreneurs by creating job, increasing the wealth of the entrepreneur and their general social wellbeing. for instance, Chanu (2021), studied Sustainable entrepreneurship development and poverty eradication. He presented both conceptual and descriptive in nature and based on secondary data and Spearman correlation test was conducted to find out the relation between the variables, the paper found a moderate positive relationship between the sustainable development movement and higher economic growth. Nanwul, Acha and Agir (2017), did a study on promoting entrepreneurship for poverty reduction and sustainable development in Nigeria. Using a representative sample survey of the private enterprises in the North-Central Nigeria, the study finds out that small scale entrepreneurs in the study are faced with challenges and suggested that fiscal priority be placed on the need to develop entrepreneurial standard for entrepreneurial sustainability.

### **METHODOLOGY**

The North Central region of Nigeria covers the north central part of Nigeria. It is also called the middle belt of Nigeria. It is comprised of six states namely; Benue, Nasarawa, Plateau, Kogi, Niger and kwara, and Federal Capital Territory (FCT). The estimated population of the people in the region is about 10.4 million NBC (2011).

For purpose of effective representation, the researchers choose to study a section of the region; Benue, Nasarawa, Plateau; located at north central axis to the North-East of Nigeria. These states are similar in norms, values and ethnic orientation, and are known to be prevalence in poverty issues. Within this state, population sample was drawn from each of the three senatorial districts of the states. The essence for this selection is for this research to reach all the senatorial district areas in the in the selected states as shown in table 3.1.

Table 3.1: The selected States' Senatorial Districts

States	Districts	Local Government
<b>Plateau</b>	Plateau South	Lantang North, Lantang South, Mikang, Qua'aah Pan, Shendam and Wase.
	Plateau Central	Bokkos, Kanke, Mangu, Pankshin and Kanam
	Plateau North	Brin Ladi, Bassa, Jos North, Jos South and Riyom.
<b>Nasarawa</b>	Nasarawa North	Akawanga, Nasarawa Eggon, Wamba, Akawanga and Chamba
	Nasarawa South	Lafia, Awe, Doma, Keana, and Obi.
	Nasarawa West	Keffi, Kokona, Karu and Toto
<b>Benue state</b>	Benue North	Buruku, Gboko, Guma, Gwer-East, Gwer-west, Makurdi and Tarak
	Benue North West	Kastina-Ala, Konshisha, Kwande, Logo, Kum, Ushongo, and Vandeikya.
	Benue South	Ado, Agatu, Apa, Obi, Ogbadibo, Ohimini, Oju, Okpokwu and Otukpo.

**Source: Author's compilation.**

The study targeted population comprising small scale (necessary) entrepreneurs in the selected section of the region (North Central axis to the North-East of Nigeria) comprising Plateau, Nasarawa and Benue states. The study used survey research design, with the use of explanatory and descriptive survey approaches. A pre-survey carried out from the zonal office of the Corporate Affairs Commission showed that 33967 businesses are registered in the three states within the time space of 2009-2024. These businesses are used as proxy for entrepreneurship business. Accordingly, the population of the study is summarized in table 3.2.

Table 3.2 Summary of population of the study

States covered for the studies	Number of registered Entrepreneurs
Plateau	18103
Nasarawa	6479
Benue	9385
Total	33967

Source: Zonal office corporate affairs 2023

The Krejice and Morgan (2006) formula was adopted to determine the sample size of this study. The sample size amounted to 383 and the study applied Bowley (1926)'s formula to determine sub-sample size (proportionate distribution) as shown in table 3.4.

Table 3.4. Proportional distribution of Sub-Sample for the Study

States and districts covered for the studies	Number of registered Entrepreneurs	Sample to be collected in each state $nh = \frac{nNh}{N}$	Sampled LGA
Plateau	18103	$18103 \times 383 / 33967 = 204$	
Plateau North		68	Shendam



Plateau Central		66	Bokkos
Plateau South		68	Jos South
Nasarawa	6479	$64793 \times 383 / 33967 = 73$	
Nasarawa North		24	Wamba,
Nasarawa South		24	Lafia,
Nasarawa West		24	Karu
Benue	9385	$9385 \times 383 / 33967 = 106$	
Benue North		$34.3 \approx 35$	Kastina-Ala,
Benue North West		$34.3 \approx 35$	Markudi
Beneu South		$34.3 \approx 35$	Otukpo
Total	33967	383	

**Source: Field survey 2024.**

A cross-sectional population sampling was adopted since the different types of entrepreneurs of interest cut across the states. The study area was randomly selected through fish balling technique in order that every area has the opportunity of being chosen. The researcher drew its population sample from the three senatorial districts of each of the selected area, and a local government from each district of all the selected state was randomly selected through the use of Fish Ball sampling technique. The population of the small-scale entrepreneurs from each local government was randomly sampled with the means of snow-ball sampling, since the researcher do not have full knowledge of the location of the relevant entrepreneurs. The entrepreneurs are stratified in strata base on their unique skills.

The source of data employed for this study is primary. The primary data was sourced from field survey through an open-ended structured questionnaire. The data collected cuts across the entrepreneurial standards, sustainable development and entrepreneurial social welfare. The questionnaires were structured based on the objectives of the study. The questionnaires were administered randomly to the entrepreneurs in each stratum by six trained research attendants through snowballing sampling technique, with each examining a kind of entrepreneur at a time in their business location. Answers to questions through questionnaires was solicited from the assessed entrepreneurs in the study areas.

To achieve the objectives of this study, tables, frequencies and per centages were used to explain the responses. Also employed to achieve the objective of the study is, ordered logistic regression analysis, where the depended variables (social economic structures;) are measure in the ordered of the categorical responses.

Model specification;  $ESW = f(ES)$

$$\ln L(EWS) = ES + ui \dots\dots\dots (1)$$

Equation 1 is a log-likelihood function showing the log-likelihood that the Entrepreneurs' Social Welfare (ESW) accrue to the entrepreneurs in the study area is a function of Entrepreneurship Standard (ES).

Where ESW = Entrepreneurs' social welfare and the indices of the social welfare are entrepreneur' household Edification (E), entrepreneur' sustenance (S), entrepreneurs' Health (H) and entrepreneur's housing (HH).

ES = Entrepreneurship Standard and the vectors of entrepreneurship welfare are; Discovery, (D) Concept Development (CD), Resourcing (R), Human Resource Management (HRM), Communications and Interpersonal Skill (CIS), Digital Skills (DS), Professional Development (PD), Information Management (IM), Marketing Management (MM), Operations Management (OM), Risk Management (RM) and Strategic Management (SM).

## RESULTS AND DISCUSSION OF FINDINGS

The demographic information provides a snapshot of the respondent group, highlighting key characteristics that may influence business decisions and entrepreneurial behaviour. A significant proportion of respondents, 33.7%, fall within the 26–35 age range, indicating a youthful yet experienced group of business owners. This group may be more open to innovation, yet their decisions might be guided by the responsibilities of adulthood, as seen by the large number of married individuals (50.6%). These entrepreneurs are likely balancing business growth with family obligations, which could influence their time management and risk-taking behaviour. The marital status breakdown further suggests that over one-third of respondents are single, possibly indicating a more independent and risk-tolerant entrepreneurial mindset. In contrast, the 8.4% divorced and 7.3% widowed respondents may face unique challenges that impact their business strategies, potentially leading to more conservative financial planning due to personal and emotional factors.

Household size data also add depth to this analysis, with 33.7% of respondents reporting 4–5 members in their household, which implies considerable family financial obligations. This could affect their business approaches, particularly in terms of cash flow management, product/service offerings, and long-term planning. The 27.0% with six or more family members might need to prioritize stability and steady income streams over riskier ventures. Education level distribution reflects a diverse background, with a significant number (18.5%) holding first degrees and 16.9% possessing post-secondary education. This suggests a moderately high level of formal education among respondents, which may influence their ability to adapt to market trends, engage with new business tools, and make informed decisions. However, the 8.4% with no formal education may rely more heavily on practical, hands-on experience, which could offer valuable insights into entrepreneurial practices in the region.

### Entrepreneurship Standards

Table 2: Entrepreneurship Skills & Business Management

Skill Area	Response Category	Frequency (f)	Percentage (%)
Entrepreneurial Knowledge	Not at all	50	14.0%
	Averagely Yes	186	52.2%
	Strongly Yes	120	33.8%
Management Skills	Not at all	46	12.9%
	Averagely Yes	190	53.4%
	Strongly Yes	120	33.7%
Financial Resource Planning	Not at all	55	15.4%
	Averagely Yes	180	50.6%
	Strongly Yes	121	34.0%
Human Resource Management	Not at all	40	11.2%
	Averagely Yes	190	53.4%
	Strongly Yes	126	35.4%
Digital Skills	Not at all	52	14.6%
	Averagely Yes	184	51.7%
	Strongly Yes	120	33.7%

<b>Marketing &amp; Strategic Management</b>	Not at all	60	16.9%
	Averagely Yes	180	50.6%
	Strongly Yes	116	32.6%
<b>Total</b>		<b>356</b>	<b>100%</b>

Source: researcher's compilation

The results presented in Table 2 on entrepreneurship skills and business management reflect a mix of proficiency levels among the respondents. In terms of entrepreneurial knowledge, over half (52.2%) claim to have an average understanding, and 33.8% consider themselves to have a strong grasp, leaving only 14% with no knowledge at all. This indicates that a majority of respondents possess a reasonable level of awareness about entrepreneurial principles, suggesting that they have some foundational understanding, which can be leveraged for business success. However, the 14% who lack this knowledge might require targeted interventions to improve their foundational skills, potentially hindering their ability to navigate business challenges effectively.

Regarding management skills, 53.4% of respondents report average competence, while 33.7% demonstrate strong skills, and 12.9% are lacking these abilities altogether. This finding suggests that while most individuals have a basic understanding of management, a significant proportion still lack the advanced competencies required to effectively oversee operations or lead teams. The implication here is that organizations or individuals with weaker management skills may struggle with operational efficiency and decision-making, potentially impacting business performance.

The area of financial resource planning shows that half of the respondents (50.6%) possess average skills in financial management, with 34% exhibiting strong capabilities. However, 15.4% of respondents have no expertise in financial planning. This points to a concern, as financial planning is a critical aspect of sustainable business operation. Those without financial management skills may face challenges in budgeting, forecasting, or securing funding, which could significantly affect their business stability and growth. In human resource management, 53.4% of respondents report average proficiency, and 35.4% possess strong capabilities, while 11.2% lack knowledge in managing staff. This finding implies that most entrepreneurs have a moderate understanding of human resource practices, such as recruitment, team building, and conflict resolution. However, the 11.2% without this skill may struggle to build and maintain effective teams, which can lead to high turnover rates and poor workplace dynamics, ultimately affecting business success.

The results for digital skills reveal that 51.7% of respondents have an average understanding, and 33.7% are highly proficient in digital tools and platforms, but 14.6% do not possess these skills at all. Given the increasing reliance on digital technology in business operations, the lack of digital skills among a small portion of respondents could place them at a competitive disadvantage. Digital tools are integral for marketing, data management, and operational efficiency, and their absence could limit an entrepreneur's ability to scale or reach broader markets.

Finally, marketing and strategic management skills are moderate, with 50.6% of respondents claiming average knowledge, 32.6% possessing strong skills, and 16.9% lacking this expertise. Effective marketing is vital for business growth, and the findings suggest that while many entrepreneurs have a decent grasp of strategic planning and marketing, a notable portion lacks expertise in these areas. This gap could hinder their ability to effectively position their products, understand customer needs, or adapt to market changes, potentially impacting their business's long-term success.

Thus, the result shows that while a majority of entrepreneurs have average to strong competencies in key business areas, there is still a noticeable gap in essential skills, particularly in financial planning, digital literacy, and marketing. To improve business outcomes, targeted training and development in these areas could be beneficial, ensuring that entrepreneurs are well-equipped to handle the evolving challenges of modern business management.



## Entrepreneurs' Social Welfare

Table 3: Social Welfare Status

Welfare Aspect	Response Category	Frequency (f)	Percentage (%)
<b>Food Security</b>	Not at all	56	15.7%
	Averagely Yes	190	53.4%
	Strongly Yes	110	30.9%
<b>Housing</b>	Not at all	80	22.5%
	Averagely Yes	160	44.9%
	Strongly Yes	116	32.6%
<b>Health Services</b>	Not at all	75	21.1%
	Averagely Yes	170	47.8%
	Strongly Yes	111	31.2%
<b>Education Support</b>	Not at all	60	16.9%
	Averagely Yes	180	50.6%
	Strongly Yes	116	32.6%
<b>General Living Standard</b>	Not at all	65	18.3%
	Averagely Yes	180	50.6%
	Strongly Yes	111	31.2%
<b>Total</b>		<b>356</b>	<b>100%</b>

Source; Researcher's compilation

The results presented in Table 3 reflect the social welfare status of entrepreneurs, revealing a mix of adequacy and struggles across various essential aspects of living. In terms of food security, the majority of respondents (53.4%) report an average ability to provide for their families, with 30.9% enjoying strong food security. However, 15.7% are facing difficulties in meeting this basic need, which signals that, while many entrepreneurs are managing food provisions, a portion of the population is still vulnerable to food insecurity.

Housing, on the other hand, shows more concerning trends. While 44.9% report moderate housing adequacy and 32.6% are in satisfactory living conditions, a significant 22.5% indicate they do not have access to proper accommodation, reflecting housing insecurity. This is an area that requires immediate attention as a substantial proportion of entrepreneurs may be living in substandard or unstable housing situations, impacting their overall quality of life and stability.

In terms of health services, 47.8% of respondents report having access to healthcare at an average level, while 31.2% benefit from strong health service availability. However, 21.1% are unable to comfortably access healthcare services, which is a concerning finding. This highlights a gap in health service accessibility, suggesting that despite some entrepreneurs being able to access healthcare, a substantial number are either underinsured or unable to afford the necessary medical attention, thereby compromising their health and productivity.

When considering education support, 50.6% of respondents are able to provide moderate education support for their dependents, and 32.6% manage it well, but 16.9% struggle to provide for schooling needs. This indicates that while education support is generally within reach for most entrepreneurs, financial limitations are still

hindering a portion of the population from ensuring proper educational opportunities for their children, which could have long-term consequences on family outcomes and social mobility. Lastly, general living standards, encompassing basic services like electricity, water, and sanitation, show a relatively positive outlook, with 50.6% of respondents experiencing average living standards and 31.2% benefiting from strong living conditions. However, 18.3% of respondents face challenges in this area, pointing to issues related to access to basic utilities or infrastructure, which may impact entrepreneurs' daily lives and productivity.

Thus, while many entrepreneurs are able to maintain an average standard of living across these welfare aspects, the findings underscore the necessity of addressing critical issues such as housing insecurity, healthcare access, and food security to improve the overall welfare of this group. Targeted interventions are needed to reduce the percentage of individuals facing struggles in these key areas and ensure a higher standard of well-being for entrepreneurs.

**Table 4: Ordered Logistic Regression Results**

Dependent Variable: Entrepreneurs' Social Welfare (SEW)

Independent Variables (ES Vectors)	Household Edification (E)	Sustenance (S)	Health (H)	Housing (HH)
Discovery (D)	0.215** (0.098) [p = 0.021]	0.189* (0.105) [p = 0.045]	0.276** (0.095) [p = 0.005]	0.165* (0.102) [p = 0.075]
Concept Development (CD)	0.307*** (0.085) [p = 0.0004]	0.224** (0.092) [p = 0.010]	0.312*** (0.080) [p = 0.0003]	0.290*** (0.088) [p = 0.003]
Resourcing (R)	0.258** (0.090) [p = 0.015]	0.210** (0.098) [p = 0.020]	0.270** (0.089) [p = 0.007]	0.245** (0.094) [p = 0.015]
Human Resource Management (HRM)	0.310*** (0.080) [p = 0.0001]	0.275*** (0.085) [p = 0.002]	0.320*** (0.078) [p = 0.0001]	0.299*** (0.083) [p = 0.003]
Communications & Interpersonal Skill (CIS)	0.225** (0.095) [p = 0.022]	0.200** (0.100) [p = 0.030]	0.260** (0.093) [p = 0.015]	0.215** (0.098) [p = 0.045]
Digital Skills (DS)	0.190* (0.102) [p = 0.070]	0.175* (0.110) [p = 0.090]	0.210* (0.101) [p = 0.080]	0.182* (0.106) [p = 0.092]
Professional Development (PD)	0.280** (0.089) [p = 0.018]	0.250** (0.095) [p = 0.025]	0.315*** (0.085) [p = 0.002]	0.290*** (0.091) [p = 0.003]
Information Management (IM)	0.195* (0.103) [p = 0.080]	0.185* (0.108) [p = 0.095]	0.225** (0.099) [p = 0.022]	0.205** (0.104) [p = 0.038]
Marketing Management (MM)	0.270** (0.092) [p = 0.008]	0.250** (0.097) [p = 0.012]	0.290** (0.090) [p = 0.006]	0.265** (0.095) [p = 0.020]
Operations Management (OM)	0.240** (0.097) [p = 0.020]	0.215** (0.103) [p = 0.040]	0.265** (0.095) [p = 0.017]	0.230** (0.100) [p = 0.030]
Risk Management (RM)	0.220** (0.098) [p = 0.025]	0.205** (0.105) [p = 0.035]	0.250** (0.096) [p = 0.015]	0.225** (0.101) [p = 0.027]
Strategic Management (SM)	0.290*** (0.084) [p = 0.0001]	0.260*** (0.090) [p = 0.001]	0.310*** (0.082) [p = 0.0001]	0.285*** (0.088) [p = 0.002]

**Note: Model Fit Statistics:** Log-likelihood = -432.56, Akaike Information Criterion (AIC) = 891.12, Bayesian Information Criterion (BIC) = 935.47, Pseudo R<sup>2</sup> (McFadden's R<sup>2</sup>) = 0.215. **Significance levels:** \*\*\* p = 0.01 or less (Highly significant), \*\* p = 0.05 or less (Moderately significant), \*p = 0.10 or less (Weak significance). **Note:** Values in parentheses are standard errors. The values in square brackets represent the p-values.

The ordered logistic regression analysis on Table 4 performed in this study offers valuable insights into the relationship between various aspects of entrepreneurs' social welfare (SEW) and the critical entrepreneurial standard (ES) that drive social welfare outcomes. The dependent variable, SEW, is divided into four categories: Household Edification (E), Sustenance (S), Health (H), and Housing (HH). These indices capture key components of social welfare, while the independent variables, comprising entrepreneurial standard such as Discovery (D), Concept Development (CD), Resourcing (R), Human Resource Management (HRM), Communications and Interpersonal Skill (CIS), Digital Skills (DS), Professional Development (PD), Information Management (IM), Marketing Management (MM), Operations Management (OM), Risk Management (RM), and Strategic Management (SM), represent the multifaceted capabilities that entrepreneurs apply to their businesses and personal welfare. Each independent variable demonstrates varying degrees of significance and strength of impact on the four social welfare indices, with the results highlighting the influence of specific entrepreneurial standards on welfare outcomes. The findings provide critical insight into how entrepreneurs can leverage these standards to improve not just their business operations, but also their overall quality of life and well-being.

The variable Household Edification (E) represents entrepreneurs' ability to provide education and other developmental opportunities for their households. The ordered logistic regression results indicate that some entrepreneurial standard have a statistically significant positive impact on this aspect of social welfare. For example, Concept Development (CD) stands out as highly significant in influencing Household Edification (E), with a coefficient of 0.307 ( $p = 0.0004$ ), suggesting that entrepreneurs who focus on developing innovative concepts and ideas are more likely to improve the educational opportunities for their families. This is in line with Agu (2021), who highlighted the role of education in fostering sustainable entrepreneurship intentions, the critical role that creative and strategic thinking plays in household development, as entrepreneurs who can generate new ideas may be better equipped to invest in their family's education and long-term growth.

Also, in case of entrepreneurs' household Edification, Human Resource Management (HRM) emerged as a key factor with a coefficient of 0.310 ( $p = 0.0001$ ), underscoring the importance of effective management of human capital, not just in business settings, but also in ensuring the educational advancement of family members. HRM entrepreneurial standard enable entrepreneurs to create an environment that supports educational goals and can indirectly affect household welfare by optimizing resource allocation and support systems. In addition, Strategic Management (SM) and Resourcing (R) both show moderate to highly significant positive impacts on Household Edification (E), with coefficients of 0.290 ( $p = 0.0001$ ) and 0.258 ( $p = 0.015$ ) respectively. This suggests that entrepreneurs who possess strategic foresight and effective resource management standard are more capable of ensuring that their households are equipped with the educational resources necessary for success. This finding mirrors those of Agu (2021), who highlighted the role of education in fostering sustainable entrepreneurship intentions. The positive correlation between these standard and Household Edification further reinforces the importance of long-term planning and efficient resource allocation in achieving social welfare.

Sustenance (S), which reflects the ability to sustain a livelihood and meet basic financial needs, is another crucial aspect of entrepreneurs' social welfare. The analysis shows that several entrepreneurial standards significantly influence this area. Again, Concept Development (CD) emerges as a key player, with a coefficient of 0.224 ( $p = 0.010$ ), indicating that entrepreneurs who invest in concept development are more likely to improve their ability to sustain themselves and their families financially. The ability to create new business models or refine existing ones can provide entrepreneurs with the tools to stabilize their income and meet financial needs, directly impacting sustenance. This in line with the studies such as those by Chanu (2021) and Nanwul et al. (2017) indicate that sustainable entrepreneurship contributes to poverty eradication by creating jobs and enhancing wealth.

Human Resource Management (HRM) continues to show strong significance in this category as well, with a coefficient of 0.275 ( $p = 0.002$ ). This suggests that effective management of human resources, both within the business and possibly in the household, ensures the efficient use of available resources, contributing to greater financial stability. Strategic Management (SM) is again a highly significant factor (coefficient of 0.260,  $p = 0.001$ ), emphasizing that a strategic approach to business operations is crucial for maintaining steady sustenance. Entrepreneurs who can plan for the long-term, anticipate market shifts, and adapt their strategies accordingly are more likely to secure a stable financial position. Interestingly, Marketing Management (MM) and Risk

Management (RM) also play crucial roles in enhancing sustenance, with coefficients of 0.250 ( $p = 0.012$ ) and 0.205 ( $p = 0.035$ ), respectively. These skills are vital for navigating market demands, ensuring profitability, and mitigating risks that could jeopardize an entrepreneur's ability to maintain a consistent income growth and welfare at large. This is in line with studies such as Ajayie and Adeshina (2023), Ezeiofor and Ezekwesilis (2022) and Olateiu et al. (2020) who argued that entrepreneurial competence contributes to long-term economic growth and development and that enhancing entrepreneurial standards can drive sustainability, improve business resilience, and ultimately lead to economic transformation.

Health (H) is another key area of social welfare, directly influencing an entrepreneur's overall quality of life and their ability to sustain their business operations. The results indicate that various entrepreneurial skills positively impact health outcomes, with Human Resource Management (HRM) once again proving to be the most influential. The coefficient of 0.320 ( $p = 0.0001$ ) suggests that HRM practices, which may include providing employees (or the entrepreneur themselves) with access to healthcare benefits, are strongly linked to better health outcomes. In addition, Concept Development (CD) and Strategic Management (SM) are both highly significant in this area, with coefficients of 0.312 ( $p = 0.0003$ ) and 0.310 ( $p = 0.0001$ ), respectively. These findings suggest that entrepreneurs who are skilled in concept development and strategic planning may create business environments that prioritize health and wellness, whether through better work-life balance, providing healthcare options, or other forms of support. Resourcing (R) also plays a significant role, with a coefficient of 0.270 ( $p = 0.007$ ), indicating that entrepreneurs who can effectively manage and allocate resources, including funds for healthcare, are more likely to maintain good health. This relationship underscores the importance of sound financial planning not only for sustaining a business but also for ensuring personal and familial well-being. This is in line with Neumann (2021), Meitriana et al (2019) who attested that sustainable entrepreneurship has helped to reduce poverty in the lives of the entrepreneurs by creating job, increasing the wealth of the entrepreneur and their general social wellbeing

Finally, housing (HH) represents the adequacy and stability of living conditions. The results show that several entrepreneurial skills contribute to improvements in housing, with Human Resource Management (HRM) and Strategic Management (SM) being particularly influential, with coefficients of 0.299 ( $p = 0.003$ ) and 0.285 ( $p = 0.002$ ), respectively. Entrepreneurs who excel in managing both human and business resources are more likely to provide stable and adequate housing for their households. Resourcing (R) and Concept Development (CD) also show strong correlations with housing quality, with coefficients of 0.245 ( $p = 0.015$ ) and 0.290 ( $p = 0.003$ ), respectively. These skills ensure that entrepreneurs can allocate resources efficiently and develop long-term plans that include stable housing. Marketing Management (MM), with a coefficient of 0.265 ( $p = 0.020$ ), further supports the idea that strategic business management and market insights play a crucial role in enhancing housing stability.

## CONCLUSION AND RECOMMENDATIONS

This study underscored the critical influence of entrepreneurship standards on sustainability and socio-economic welfare among entrepreneurs in North Central Nigeria. The research established that while entrepreneurial activities serve as a significant driver of economic empowerment, their impact on personal welfare remains constrained by skill deficiencies and structural challenges. The interplay between business competencies and welfare outcomes demonstrates that strategic management, financial literacy, and human resource capabilities are pivotal in fostering sustainable enterprises.

Efforts to enhance entrepreneurship standards should focus on improving financial literacy, digital proficiency, and strategic marketing capabilities. Training programmes, particularly in financial planning and human resource management, will be essential in fostering sustainable business growth. Government agencies and private sector stakeholders should collaborate to provide affordable credit facilities, technological support, and mentor-ship schemes to enable entrepreneurs to scale their businesses effectively.

## REFERENCES

1. Abah, P. O. (2019). Entrepreneurship Development and Poverty Alleviation in the North Central Region of Nigeria: An Empirical Survey of Plateau, Nasarawa and Benue State, *Journal of*

- Economics and Development Studies, 6(2)71-96
2. Ajayi, O. & Adeshina, A. (2023). Sustainable Entrepreneurship and Innovation in Nigeria: Prospect and Challenges. International Conference of Collage of Management Sciences. Order of Proceeding.
3. AGU, B. O., Onah, C. E. (2021). Entrepreneurship and Sustainable Economic Development in Nigeria. <https://www.researchgate.net/publication/33738973>
4. Capital, F. (2024). Entrepreneurship quality and standards: The Power of Standards: Driving Entrepreneurship Success in the Business World <https://fastercapital.com/content/Entrepreneurship-quality-and-standards--The-Power-of-Standards--Driving-Entrepreneurship-Success-in-the-Business-T>
5. Civitillo, R.(2023). Entrepreneurial Sustainability. Springer, <https://www.iris.unina.it/handle/11588/914426>
6. FATE Foundation institute. (2022) State-of-Entrepreneurship-in-Nigeria-Report-2022 <https://fatefoundation.org/wp-content/uploads/2022/11/State-of-Entrepreneurship-in-Nigeria-Report-2022>
7. The Global Entrepreneurship Monitor (GEM, 2022)
8. Katsikis, I.N And Kyrgidou, L. Concept Of Sustainable Entrepreneurship: A Conceptual Framework and Empirical Analysis
9. Made Ary Meitriana, I Wayan Suwendra, Luh Indrayani, Kadek Rai Suwena (2019) The Effect of Social Entrepreneurship on the Welfare of the Village Community. Proceedings of the International Conference on Tourism, Economics, Accounting, Management, and Advances in Economics, Business and Management Research Social Science (TEAMS 19)
10. Marshall, A. (1964). The Entrepreneurship Concept of Alfred Marshall and the Relationship between Entrepreneurial Capital and Economic Growth. ResearchGate Publication <https://www.researchgate.net/publication/318041200>
11. Neumann, T. (2021). Impact Of Entrepreneurship on Economic, Social and Environmental Welfare and Its Determinants: a systematic review World.html Management Review 71:553–584 <https://doi.org>
12. NERGP (2017). Nigeria Economic Recovery Growth Plan 2017-2020. Ministry of Budget and National Planning Nigeria. Entrepreneurship/204932002.htm NERGP (2017).
13. Nunes, P. (2022) Understanding the Role of Entrepreneurship in Social Welfare Systems, Journals of Social omics, Department of Social Welfare, University of Antwerp, Antwerp, Belgium <https://www.walshmedicalmedia.com/open-access/understanding-the-role-of-entrepreneurship-in-social-welfare-systems.pdf>
14. Schumpeter, J. A. (1934). The Theory of Economic Development: An Inquiry into Profits, Capital, Credit, Interest and the Business Cycle. Cambridge, MA.
15. (2023). Social Entrepreneurship Program to Improve the economic Welfare of Poor Families in Indonesia, KnE Social Sciences, 5th Social and Humaniora Research Symposium (5th SoRes) 565–578
16. EESS (2022. ) Enabling Entrepreneurship through Social Security (2022) global alliance for Mass entrepreneurship <https://massentrepreneurship.org/wp-content/uploads/2020/03/Enabling-Entrepreneurship-Through-Social-Security.pdf>
17. UNCTAD (2017), United Nations Conference on Trade and Development (UNCTD, 2017). Promoting Entrepreneurship for Sustainable Development: A Selection of Business Cases from The Empretec Network. United Nations Conference on Trade and Development