



## STAKEHOLDERS' PERCEPTIONS OF STRATEGIES, OPPORTUNITIES AND CHALLENGES OF IMPLEMENTING THE NATIONAL SKILLS QUALIFICATION FRAMEWORK FOR ENTREPRENEURSHIP AND SUSTAINABLE DEVELOPMENT

BY

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### Abstract

*The National Skills Qualification Framework (NSQF) is a structured framework designed to promote and enhance the quality of skills development and vocational education in Nigeria. It aims to establish a standardized system for recognizing and certifying skills across various sectors thereby facilitating the alignment of education and training with the needs of the labour market. This study examined the stakeholders' perceptions of strategies, opportunities and challenges of implementing the National Skills Qualification Framework for entrepreneurship and sustainable development in Nigeria. The study had eight purposes, four research questions and four null hypotheses. The study adopted descriptive survey design. The population of the study comprised public TVET institutions teachers, students and artisans in the six states of southwestern Nigeria. Multi-stage sampling techniques were used to sample 1,800 participants. The instrument used for data collection was a validated four-part research questionnaire, structured on the 4-point rating scale. Cronbach alpha method was used to determine the reliability of the instrument, and the reliability coefficients were 0.87 and 0.89. The data collected were analysed using mean and standard deviation for the research questions while the hypotheses were tested with independent-samples t-test and Two-way Analysis of Variance. The study found among others that the level of knowledge of the stakeholders on the contents of the National Skills Qualifications Framework was very low; and the best strategies for implementing NSQF included, training providers selection should be public and transparent and there should be a funding scheme to which both government and industry can contribute,*

*among others. Based on the findings, it was concluded that the low level of stakeholder knowledge about the NSQF highlights the urgent need for robust sensitization and training programs to bridge this gap. Transparent selection processes for training providers and a collaborative funding scheme involving both government and industry were identified, among others, as essential strategies for successful NSQF implementation.*

## **Introduction**

The need for accelerated but sustainable economic growth and national development has increased global focus on Technical Vocational Education and Training (TVET) as a prime implement for building the technical manpower resources of an industrializing society. The National Skills Qualification Framework (NSQF) in Nigeria is a structured framework designed to promote and enhance the quality of skills development and vocational education in the country. It aims to establish a standardized system for recognizing and certifying skills across various sectors, thereby facilitating the alignment of education and training with the needs of the labor market. It is a system that recognizes and classifies skills, knowledge and competencies acquired by individuals. It also provides a structure for the development of the skills irrespective of time, place or manner of acquisition. The NSQF is a competency-based system that structures qualifications into categories (levels) of aptitude, knowledge and skills. It is a developmental implement which imitates the steps taken by rapidly developing countries to fast-track entrepreneurial progress through acceleration of manpower development for the benefit of businesses and industry.

One of the earliest competence-based frameworks for vocational qualifications was the English National Vocational Qualifications Framework (NVQF) launched in 1987. This was followed by a comprehensive National Vocational Qualifications (NVQ) launched in New Zealand in 1992 and a similar one in South Africa in 1995. These early frameworks drew their intellectual inspiration from the competence-based teacher training models instituted in the USA (Coles, 2017). As recently as 2004, only five NQFs were in existence together with a larger number of competence-based vocational education and training frameworks; the latter were sometimes limited to one or more industry or occupational sectors. Since then, 120 countries have developed some form of qualification framework- some as NVQFs and restricted to vocational qualifications (like NVQs) and others being comprehensive frameworks for all qualifications

The NSQF is structured into various levels, each representing a specific set of competencies and skills. These levels help in categorizing qualifications based on the complexity of skills and knowledge required. It emphasizes competency-based education and training, focusing on what individuals can do with their skills rather than just the knowledge they possess. The framework includes provisions for recognizing skills and competencies acquired through informal and non-formal learning, allowing individuals to gain formal recognition for their skills. The NSQF aims to bridge the gap between education and industry by ensuring that the skills taught meet the demands of the relevant industry.

The framework includes mechanisms for quality assurance to ensure that training providers meet certain standards and that the qualifications awarded are credible and recognized. The NSQF promotes lifelong learning by allowing individuals to continuously upgrade their

skills and qualifications throughout their careers. The objectives of the scheme are to enhance the employability of individuals by providing them with relevant skills, standardize qualifications across various sectors and levels of education, facilitate the mobility of learners and workers within and across sectors, and to support the development of a skilled workforce that meets the demands of the economy.

### **The framework is the structure within which the National Skills**

Qualifications (NSQs) operate (NBTE, 2015). The framework aims at promoting lifelong learning, providing quality assurance and recognition, understanding occupational learning routes and qualifications and how they relate to each other, providing access to vocational education and training opportunities. making progression routes easier and clearer. The Framework also seeks to improve career mobility and to increase the scope for recognition of prior learning.

Lifelong learning is necessary to enhance an individual's employability in a dynamic and continually evolving and increasingly global work environment. NSQF seeks to provide opportunities for training to meet needs arising from technological and economic development and changing career paths. National Skills Qualifications Framework can offer Nigeria an instrument for promoting the development of new qualifications, making delivery more flexible and widening the range of providers. The framework is designed to increase the influence of stakeholders on the development of qualifications so that the system is more responsive to the needs of the labour market. Employers and workers' organizations play important roles in developing competency standards for qualifications.

Originally NQFs were largely an Anglophone phenomenon. However, the decision of the EU to launch a European Qualifications Framework (EQF), stimulated the 29 EU countries to develop their own NQFs. Furthermore, with the support of the European Training Foundation (ETF) and other international agencies, countries in the other continents have followed. The result is that by the beginning of the third decade of the twenty-first century NSQF has become a global phenomenon, although compliance with the frameworks differ from nation to nation.

Ademiluyi et al (2023) views entrepreneurship as the combination of initiative, innovation and calculated risk taking, associated with identifying market opportunities, mobilizing resources and managing them efficiently in the operation of productive viable and socially responsible enterprise. In his opinion, entrepreneurship involves applying focused strategies to new ideas and new insights to create a product or service that satisfies customers' need or solves existing problems. Entrepreneurship is the process of designing, launching and running a new business (Okoye & Okoji, 2021). They explain that it is the process which involves the efforts of an individual in identifying viable opportunities in a business environment and managing the resources needed to exploit those opportunities. Entrepreneurship therefore is the process of using available capital in any form for business endeavors in an open and free market economy, for the primary purpose of making profit. Entrepreneurship is the ultimate propeller of TVET-driven creativity and innovation.

Entrepreneurship is also universally recognized as a prime implement of sustainable development. The New World Encyclopedia (2014) defines sustainable development as balancing the protection of the natural environment with the fulfillment of human needs so that the needs can be met not only in the present but also in the indefinable future. The term was

prompted by global recognition of the close linkage between environmental health and human development as well as the need to alter social and economic policies to minimize the human impact on the planet.

The United Nations Division for Sustainable Development identifies several areas as falling within the scope of sustainable development. These include agriculture, biodiversity, capacity building, climate change, education and awareness, poverty, sanitation, technology, trade and environment, sanitation, water and waste among others. The common principles guiding action programmes of sustainable development include: Dealing transparently and systemically with risks, uncertainty and irreversibility, ensuring appropriate valuation, appreciation and restoration of nature, integration of environmental, social, human and economic goals in policies and activities, equal opportunity and community participation in developmental efforts, conservation of biodiversity and ecological integrity, ensuring inter-generational equity, recognizing the global integration of localities, a commitment to best practice, no net loss of human capital or natural capital and the principle of continued improvement.

Sustainable development is a TVET concern because while TVET is all about personal progress and national development, unbridled development portends danger to future generations and to mankind as a race. For instance, while logging is necessary for construction and other creative tasks, reckless logging could damage the ecosystem, impair biodiversity, accelerate desertification and ultimately affect the quality of life on earth. These concerns have helped introduce in TVET, concepts like green TVET and continuous human capital development which is a major premise of the national skills qualifications' framework.

Technical and vocational qualifications in traditional systems were designed to lead directly to employment and rarely gave opportunities for those who qualified to progress to higher education. With the reduction of craft-based occupations and the growth of technical occupations requiring more theoretical knowledge, governments throughout the world have become increasingly concerned to open routes from vocational and technical qualifications to higher education. Including qualifications achieved through vocational programmes as well as those obtained in universities and polytechnics within the same framework promotes this possibility.

### **Statement of the Problem**

The National Skills Qualification Framework was introduced by the Federal Government of Nigeria in 2015 to stimulate reforms in skills development and facilitate establishment of nationally standardized and internationally comparable qualifications. The Framework seeks to increase the flexibility and relevance of training programmes, ease recognition of prior learning, enhance lifelong learning and improve transparency of qualification systems. The programme is in line with global best practices. It is based on the universal paradigm shift from education based on inputs to that based on learning outcomes. Competency based learning shifts focus from training providers to users, emphasizes what the learner is supposed to be able to accomplish at the end of the training and ensures universality and acceptability of qualifications. Properly implemented, NSQF is expected to have an enduring impact on skill acquisition for self-reliance and entrepreneurship, and ultimately to have measurable influence on

sustainable national development. The acquisition of universally recognized certificates is bound to enhance job mobility and self-reliance. However, laudable and desirable as these objectives evidently are, not much has been heard, since its introduction, on the practical implementation of the programme in Nigeria. It even appears that most NSQF stakeholders are pathetically oblivious of the programme, blissfully unaware of its contents, the opportunities it presents for craftsmen everywhere and the challenges inherent in implementing such a revolutionary programme. From the researchers' interactions with artisans, students of TVET, teachers and managers of TVET institutions, it is obvious that very few institutions have keyed into the implementation of the Framework, leaving a great national opportunity largely unharnessed. If critical stakeholders continue to ignore the programme, the objectives will not be realized, closing a major opportunity for individual progress and accelerated national development.

The researchers also note the paucity of research work on NSQF in Nigeria., which suggests that the academia is either ignorant or disdainful of the programme. This situation should not be allowed to continue, hence the need for this study.

### **Research Questions**

1. What is the level of respondents' knowledge of the contents of the National Skills Qualifications Framework?
2. What are respondents' perceptions of benefits of implementing the National Skills Qualifications Framework for entrepreneurship and sustainable development.?
3. What do respondents perceive as challenges of implementing the National Skills Qualifications Framework for entrepreneurship and sustainable development.?
4. What are respondents' perceptions of the best strategies for implementing the National Skills Qualifications Framework for entrepreneurship and sustainable development?

### **Hypotheses**

1. There is no significant difference in the mean ratings of respondents regarding the level of respondents' knowledge of the contents of the National Skills Qualifications Framework based on the states in which they are located.
2. There is no significant differences in respondents' perception of benefits of implementing the National Skills Qualifications based on classifications for entrepreneurship and sustainable development (Lecturer/Student/Artisan/Entrepreneur)
3. There is no significant difference in perceived challenges of implementing the National Skills Qualifications Framework for entrepreneurship and sustainable development based on respondents' gender.
4. There is no significant difference in respondents' perceptions of the best strategies for implementing the National Skills Qualifications Framework for entrepreneurship and sustainable development, based on classification (Lecturer/Student/Artisan/Entrepreneur)



## Research Methodology

The study was carried out to ascertain stakeholders' perceptions of strategies, opportunities and challenges of implementing the National Skills Qualification Framework for entrepreneurship and sustainable development. in Nigeria. The research was conducted in the six states of southwestern Nigeria, namely Lagos, Ogun, Oyo, Osun, Ondo and Ekiti states. Southwestern Nigeria, and Lagos in particular, are the industrial and commercial heartland of Nigeria.

The study employed descriptive survey research design which involved the collection of data in order to test hypotheses or answer research questions concerning the status of the subjects (Nwanna, 2011). Surveys are investigations in which the subjects are studied in their natural environments without treatment. Umoru (2013) explains that survey is particularly effective for seeking individuals' opinions, attitudes and perceptions.

Descriptive survey designs are ideal when the researcher seeks to describe or document the characteristics, attitudes, behaviours, opinions or perceptions of a group or population being studied. It is appropriate when the researcher seeks to determine characteristics, extent, frequencies, trends, or categories, The research design was chosen because the study sought to determine respondents' opinions on awareness, opportunities, challenges and strategies of implementing the NSQF in the Nigerian educational system.

The study population consisted of public TVET institutions teachers, students and artisans in the six states of southwestern Nigeria. TVET institutions consist of polytechnics and technical colleges. At the time of the study, there were 19 public polytechnics in southwestern Nigeria, comprising five federal and 14 state polytechnics. In addition, there were 37 NBTE-accredited Technical Colleges consisting of five federal and 32 state-owned colleges.

Multi-stage sampling techniques were used. In the first place, three of the six states were selected using simple random sampling. Purposive sampling was used to select one each of federal and state-owned polytechnics and technical colleges in each of the selected states. Stratified simple random sampling was used to select 100 final year students and 25 teachers from each of the institutions to be studied. The stratifications included gender (male/female), and courses of study (STEM/social sciences). Convenience sampling was used to select 25 artisans in the immediate neighbourhood of each institution, for ease of reach. The sampled size was 150 per institutions (including the artisans) and 600 per state. The total study sample consisted of 1800 subjects.

The instrument used in gathering data for this study was a validated four-part research questionnaire, structured on the 4-point rating scale with response options of High Level/Strongly Agreed (4 points), Moderate Level/Agreed, (3 points), Low Level/Disagreed, (2points) and Very Low Level/Strongly Disagreed (1 point). The instrument was validated by three experts and pilot tested. Cronbach Alpha method was used to determine the internal consistency of the instrument.

The data collected for the study were analysed using mean ratings to answer the research questions and standard deviation to determine the closeness or otherwise of the responses to the mean. Independent samples t-test statistics and ANOVA were used to test the null hypothesis of no significant difference at the probability level of 0.05.

## Results

Descriptive and inferential statistics were used for this study's data analysis results, including tables, mean, and standard deviation. The presentations are organized according to

research questions that guided the study. Out of the 1,800 copies of the questionnaire distributed, 1,353 were retrieved, making 75.2% return rate. The breakdown of the retrieved copies of the questionnaire includes 232 lecturers, 650 students, 348 artisans and 123 industrialists. The analysis of the data collected is presented under the relevant headings as follows:

**Research Question One:** What is the level of respondents' knowledge of the contents of the National Skills Qualifications Framework?

Data collected in respect of this research question is presented in Table 1.

**Table 1: Mean and Standard Deviation scores on the level of respondents' knowledge of the contents of the National Skills Qualifications Framework**

S/N	Items on the Questionnaire	$\bar{x}$	SD	Remarks
1.	History of NSQF in Nigeria.	1.02	0.21	Low level
2.	Objectives of National Vocational Qualifications Framework in Nigeria.	1.68	0.47	Low level
3.	Benefits of NSQF to workers.	1.60	0.51	Low level
4.	Benefits of NSQF to entrepreneurs and employers of labour.	1.71	0.46	Low level
5.	Benefits of NSQF to national economy.	1.69	0.49	Low level
6.	Qualifications available through NSQF in my field.	1.63	0.49	Low level
7.	The role of the major stakeholders in NSQF in Nigeria.	1.64	0.48	Low level
8.	The process of NSQF delivery.	1.31	0.47	Low level
9.	Role and responsibilities of NSQF training providers.	1.74	0.44	Low level
10.	Role of NSQF Sector Skills Councils.	1.54	0.50	Low level
11.	Role of NBTE as NSQF programme regulator.	1.00	0.09	Low level
12.	NSQ Training providers in your field.	1.69	0.48	Low level
13.	Qualifications currently available for NSQF implementation.	1.61	0.53	Low level
14.	Levels (Stages) of NSQF in Nigeria.	1.72	0.48	Low level
15.	Challenges of NSQF implementation in Nigeria.	1.69	0.48	Low level
<b>Grand Weighted Mean and SD</b>		<b>1.55</b>	<b>0.44</b>	<b>Low level</b>

Analysis of data in Table 1 shows the mean and standard deviation of responses on the level of respondents' knowledge of the contents of the National Skills Qualifications Framework. The respondents indicated that their knowledge of the history of NSQF in Nigeria was low; they similarly indicated that their knowledge of the objectives of National Vocational Qualifications Framework in Nigeria was low and their knowledge of benefits of NSQF to workers was low. These were supported by mean scores of 1.02, 1.68 and 1.60. The respondents also indicated a low knowledge level of the benefits of NSQF to entrepreneurs, employers of labour, and national economy, same way their knowledge of Qualifications available through NSQF in their field was low and their knowledge of the role of major stakeholders in NSQF in Nigeria was low. These were supported by mean scores of 1.71, 1.69, 1.63 and 1.64 respectively.

The analysis also shows that the respondents indicated that their knowledge of the process of NSQF delivery, role and responsibilities of NSQF training providers, role of NSQF Sector Skills Councils as well as role of NBTE as NSQF programme regulator were low. These were supported by mean scores of 1.31, 1.74, 1.54 and 1.00 respectively. In addition, the respondents indicated that their knowledge of NSQ training providers in their field was low, same way their knowledge of qualifications currently available for NSQF implementation, levels

(stages) of NSQF in Nigeria and challenges of NSQF implementation in Nigeria are low. These were supported by mean scores of 1.61, 1.69, 1.72 and 1.69 respectively. All the 15 items constructed had standard deviations ranging from 0.21 to 0.51. This means that the responses of the respondents were not widespread as they were close to their respective mean scores. Table 1 has a grand mean and standard deviation of 1.55 and 0.44 respectively. This implies that the level of knowledge of the stakeholders on the contents of the National Skills Qualifications Framework is very low (mean = 1.55, SD = 0.44).

**Research Question Two:** What are respondents' perceptions of the best strategies for implementing the National Skills Qualifications Framework for entrepreneurship and sustainable development?

Data collected in respect of this research question is presented in Table 2.

**Table 2: Mean and Standard Deviation scores of the best strategies for implementing the National Skills Qualifications Framework**

S/N	Items on the Questionnaire	$\bar{x}$	SD	Remarks
16.	NSQF should be widely publicized to the general public using various public communication media and means.	2.60	0.65	Agreed
17.	Organised labour and industry should be closely involved in designing and implementing NSQF policy for entrepreneurship acceptance.	2.72	0.69	Agreed
18.	The academia must be carried along in formulating and implementing NSQF.	3.34	0.74	Agreed
19.	There should be a structure of incentives for NSQF participants	3.31	0.80	Agreed
20.	There should be a funding scheme for NSQF to which both government and industry will contribute.	3.35	0.71	Agreed
21.	There should be a data bank of the skills endowments and needs of each industry for NSQF to focus on.	3.26	0.81	Agreed
22.	NSQF structures, purposes and limitations should be legislatively designed to avoid conflicts.	3.08	0.85	Agreed
23.	Placement of NSQF products should be fast-tracked in both government organisations and industry.	3.05	0.74	Agreed
24.	Quality assurance mechanisms should be transparent to engender public and industry confidence.	3.21	0.93	Agreed
25.	Selection of NSQ training providers should be public and transparent.	3.34	0.77	Agreed
26.	Appointment and training of NSQ trainers should be rigorous and public.	3.26	0.80	Agreed
27.	The quality assurance mechanism should be of the highest level of integrity and should leave no room for doubt.	2.99	0.77	Agreed
28.	Youths must be mobilized to accept NVQ as a tool for poverty alleviation and panacea for unemployment	3.24	0.80	Agreed
29.	Government must promote NSQ as a tool for economic growth and sustainable development	3.18	0.86	Agreed
30.	Government should create a separate body outside the NBTE to regulate NSQF in Nigeria.	3.04	0.97	Agreed
<b>Grand Weighted Mean and SD</b>		<b>3.13</b>	<b>0.79</b>	<b>Agreed</b>



Analysis of data in Table 2 shows the mean and standard deviation of responses on the respondents' perceptions of the best strategies for implementing the National Skills Qualifications Framework for entrepreneurship and sustainable development. The respondents agreed to all the item constructed as strategies for implementing the National Skills Qualifications Framework for entrepreneurship and sustainable development. The respondents agreed that NSQF should be widely publicized to the general public using various public communication media and means, organised labour and industry should be closely involved in designing and implementing NSQF policy for entrepreneurship acceptance as well as must carry the academia along in formulating and implementing NSQF. These were supported by mean scores of 2.60, 2.72, and 3.34 respectively.

The respondents also agreed that there should be a structure of incentives for NSQF participants, a funding scheme for NSQF to which both government and industry will contribute as well as a data bank of the skills endowments and needs of each industry for NSQF to focus on. These were supported by mean scores of 3.31, 3.35 and 3.26. The analysis also shows that the respondents agreed that NSQF structures, purposes and limitations should be legislatively designed to avoid conflicts similarly; placement of NSQF products should be fast-tracked in both government organisations/industry and quality assurance mechanisms should be transparent to engender public and industry confidence as well as selection of NSQ training providers should be public and transparent. These were supported by mean scores of 3.08, 3.05, 3.21 and 3.34.

In addition, the respondents agreed that appointment and training of NSQ trainers should be rigorous and public, quality assurance mechanism should be of the highest level of integrity and should leave no room for doubt, same way they agreed that youths must be mobilized to accept NVQ as a tool for poverty alleviation and panacea for unemployment. Also, Government must promote NSQ as a tool for economic growth and sustainable development as well as create a separate body outside the NBTE to regulate NSQF in Nigeria. Mean scores of 3.26, 2.99, 3.24, 3.18 and 3.04 supported these. All the 15 items constructed had standard deviation ranging from 0.65 to 0.97. This means that the responses of the respondents were not widespread as they were close to their respective mean scores. Table 2 has a grand mean and standard deviation of 3.13 and 0.79 respectively. This means that all the items in Table 2 are strategies for implementing the National Skills Qualifications Framework for entrepreneurship and sustainable development. This implies that the best strategies for implementing the National Skills Qualifications Framework are, NSQ training providers selection should be public and transparent and there should be a funding scheme for NSQF to which both government and industry will contribute among others.

**Research Question Three:** What are respondents' perceptions of the benefits of implementing the National Skills Qualifications Framework for entrepreneurship and sustainable development?

Data collected in respect of this research question is presented in Table 3.

**Table 3: Mean and Standard Deviation scores of the benefits of implementing the National Skills Qualifications Framework for entrepreneurship and sustainable development**

S/N	Items on the Questionnaire	$\bar{x}$	SD	Remarks
31.	NSQF could open the door of certification to experienced craftsmen.	3.29	0.82	Agreed
32.	NSQF could reduce complexities and ambiguities in TVET qualifications.	3.29	0.74	Agreed
33.	NSQF could establish pathways to professionalism for experienced artisans.	3.18	0.91	Agreed
34.	NSQF could narrow gaps between TVET graduates' skills and industry's needs.	3.00	0.91	Agreed
35.	NSQF could help overcome progression limitations among TVET graduates.	2.76	1.05	Agreed
36.	NSQF could promote life-long learning	2.54	0.57	Agreed
37.	NSQF could ease career progression routes.	3.57	0.56	Strongly Agreed
38.	NSQF could help to improve qualifications comparability.	2.74	0.61	Agreed
39.	NSQF provides self-paced learning.	3.36	0.79	Agreed
40.	NSQF provides cost-effective training for individuals and organizations.	2.96	0.73	Agreed
41.	NSQF could improve corporate profit and competitiveness.	2.60	0.73	Agreed
42.	NSQF promotes staff retention.	3.45	0.72	Agreed
43.	NSQF could reduce unemployment and crime rates.	2.67	0.59	Agreed
44.	NSQF could promote productivity and efficiency.	3.44	0.76	Agreed
45.	NSQF could promote economic expansion.	2.83	0.74	Agreed
<b>Grand Weighted Mean and SD</b>		<b>3.05</b>	<b>0.75</b>	<b>Agreed</b>

Analysis of data in Table 3 shows the mean and standard deviation of responses on the respondents' perceptions of the benefits of implementing the National Skills Qualifications Framework for entrepreneurship and sustainable development. The respondents agreed to all the item constructed as benefits of implementing the National Skills Qualifications Framework for entrepreneurship and sustainable development. The respondents agreed that NSQF could open the door of certification to experienced craftsmen, reduce complexities and ambiguities in TVET qualifications and could establish pathways to professionalism for experienced artisans. These were supported by mean scores of 3.29, 3.29, and 3.18. The respondents also agreed that NSQF could narrow gaps between TVET graduates' skills and industry's needs, help overcome progression limitations among TVET graduates and promote life-long learning as well as ease career progression routes. These were supported by mean scores of 3.00, 2.76, 2.54 and 3.57.

The analysis also shows that the respondents agreed that NSQF could help to improve qualifications comparability, provides self-paced learning and cost-effective training for individuals and organizations as well as improve corporate profit and competitiveness. These were supported by mean scores of 2.74, 3.36, 2.96 and 2.60. In addition, the respondents agreed that NSQF promotes staff retention, could reduce unemployment and crime rates, promote productivity and efficiency as well as economic expansion. Mean scores of 3.45, 2.67, 3.44, and 2.83 supported these. All the 15 items constructed have standard deviation ranging from 0.56 to

1.05. This means that the responses of the respondents were not widespread as they were close to their respective mean scores. Table 3 has a grand mean and standard deviation of 3.05 and 0.75. This means that all the items in Table 3 are benefits of implementing the National Skills Qualifications Framework for entrepreneurship and sustainable development. This implies that the benefits of implementing the National Skills Qualifications Framework are that it could ease career progression routes, open the door of certification to experienced craftsmen and reduce complexities and ambiguities in TVET as well as could narrow gaps between TVET graduates' skills and industry's needs among others.

**Research Question Four:** What do respondents perceive as challenges of implementing the National Skills Qualifications Framework for entrepreneurship and sustainable development?

Data collected in respect of this research question is presented in Table 4.

**Table 4: Mean and Standard Deviation scores of the challenges of implementing the National Skills Qualifications Framework**

S/ N	Items on the Questionnaire	$\bar{x}$	SD	Remarks
46.	Funding is a major challenge for NSQF implementation.	2.92	0.81	Agreed
47.	Public acceptance may prove difficult.	2.87	0.74	Agreed
48.	Public awareness is very low	2.90	0.77	Agreed
49.	NSQF graduates may have poor theoretical knowledge	2.89	0.76	Agreed
50.	NSQF may not fully address the problem of skills mismatch.	3.53	0.77	Strongly Agreed
51.	Training outlets may not have all requisite facilities and equipment.	3.38	0.96	Agreed
52.	NBTE as a regulatory body may be too overloaded to effectively cater for NSQF implementation.	3.37	0.89	Agreed
53.	Nigerians may be culturally incapable of accepting extra-institutional qualifications.	3.18	0.80	Agreed
54.	NSQF may not redress the low public regards for TVET.	3.09	0.71	Agreed
55.	Youths may not be well-disposed to National Skills qualifications	2.60	0.65	Agreed
56.	Entrepreneurs and industrialists may not fully accept skills qualifications.	2.72	0.69	Agreed
57.	There may be inadequate data on skill gaps that demand national skills qualifications.	3.34	0.74	Agreed
58.	Public labour laws and practices have not fully covered national skills qualifications.	3.31	0.80	Agreed
59.	Quality assurance process will have to be very rigorous to engender credibility	3.35	0.71	Agreed
60.	Public information on NSQF will have to improve exponentially to win public acceptance	3.26	0.81	Agreed
<b>Grand Weighted Mean and SD</b>		<b>3.11</b>	<b>0.77</b>	<b>Agreed</b>

Data in Table 4 shows the mean and standard deviation of responses on the respondents' perceptions of the challenges of implementing the National Skills Qualifications Framework for

entrepreneurship and sustainable development. The respondents agreed to all the items constructed as challenges of implementing the National Skills Qualifications Framework for entrepreneurship and sustainable development. The respondents agreed that funding was a major challenge for NSQF implementation; similarly, they agreed that public acceptance might prove difficult, public awareness very low while NSQF graduates could have poor theoretical knowledge. These were supported by mean scores of 29.2, 2.87, 2.90 and 2.89 respectively. The respondents strongly agreed that NSQF may not fully address the problem of skills mismatch and training outlets may not have all requisite facilities and equipment, same way they agreed that NBTE as a regulatory body may be too overloaded to effectively cater for NSQF implementation while Nigerians may be culturally incapable of accepting extra-institutional qualifications. These were supported by mean scores of 3.53, 3.38, 3.37 and 3.18 respectively.

The analysis also shows that the respondents perceived the challenges to also include that NSQF may not redress the low public regards for TVET, youths may not be well-disposed to National skills qualifications and entrepreneurs or industrialists may not fully accept skills qualifications while there may be inadequate data on skill gaps that demand national skills qualifications. These were supported by mean scores of 3.09, 2.60, 2.72, and 3.34. In addition, the respondents agreed that public labour laws and practices did not fully cover national skills qualifications. Similarly, they agreed that quality assurance process would have to be very rigorous to engender credibility and public information on NSQF would have to improve exponentially to win public acceptance. Mean scores of 3.31, 3.35, and 3.26 supported these. All the 15 items constructed have standard deviation ranging from 0.65 to 0.96. This means that the responses of the respondents were not widespread as they were close to their respective mean scores. Table 4 has a grand average mean and standard deviation of 3.11 and 0.77. This means that all the items in Table 4 are challenges of implementing the National Skills Qualifications Framework for entrepreneurship and sustainable development. This implies that the challenges of implementing the National Skills Qualifications Framework are that NSQF may not fully address the problem of skills mismatch and low public regards for TVET and training outlets may not have all requisite facilities and equipment while funding is a major challenge for NSQF implementation among others.

### Test of Hypotheses

The null hypotheses of the research study were tested using Independent Sample t-test and Analysis of Variance (ANOVA) at 0.05 level of significance. The summary of the test of hypotheses are presented in Tables 5 to 8 as follows:

H<sub>01</sub>: There is no significant difference in the mean ratings of respondents regarding the level of respondents' knowledge of the contents of the National Skills Qualifications Framework based on the states in which the schools are located.

**Table 5: Summary of ANOVA result showing difference in the mean ratings of stakeholders regarding their level of knowledge of the contents of the National Skills Qualifications Framework based on the states in which the schools are located**

Residence	Number	Mean ( $\bar{x}$ )	SD	F	Sig.	Decision	
LAGOS	375	1.48	0.373	4.715	0.106	Ho1	Not Rejected
OGUN	637	1.50	0.409				
OSUN	341	1.73	0.244				

The descriptive statistics (frequency, mean and standard deviation) as presented on table 5 shows stakeholders from schools located in Lagos, Ogun and Osun have mean scores of 1.48, 1.50, and 1.73, and corresponding standard deviation of 0.37, 0.40, and 0.24 respectively. The result of analysis of variance as presented in Table 5 reveals that the calculated value of F is 4.715 ( $F_{1,350} = 4.715$ ) and the observed probability value is 0.106 which is greater than the fixed probability value of 0.05 ( $P > 0.05$ ). This indicated that the null hypotheses which stated that, there is no significant difference in the mean ratings of respondents regarding the level of respondents' knowledge of the contents of the National Skills Qualifications Framework based on the states in which the schools are located was not rejected. This implied that stakeholders do not significantly differ in their responses regarding the level of their knowledge of the contents of the National Skills Qualifications Framework based on the states in which the schools are located.

Ho2: There is no significant difference in respondents' perceptions of the best strategies for implementing the National Skills Qualifications Framework for entrepreneurship and sustainable development, based on school ownership (Federal/State).

**Table 6: Summary of t-test of the difference in the mean ratings of stakeholders' perceptions of the best strategies for implementing the National Skills qualifications Framework based on school ownership (Federal/State)**

Group	N	Mean	SD	t-cal	Df	p-value	Decision
Federal	516	3.16	0.45	2.473	1351	0.014	Ho2 Rejected
State	837	3.09	0.36				

$P < 0.05$

The data in Table 6 reveals that there are 516 stakeholders from Federal owned schools and 837 stakeholders from State owned schools. The responses of the stakeholders indicated that stakeholders from Federal owned schools had higher mean score ( $\bar{x} = 3.16$ ;  $SD = 0.45$ ) than State owned schools ( $\bar{x} = 3.09$ ;  $SD = 0.36$ ). Their responses are close to the mean as the standard deviations are very low. The table revealed that there was significant difference in the mean rating of respondents' perceptions of the best strategies for implementing the National Skills Qualifications Framework for entrepreneurship and sustainable development, based on school ownership ( $t_{1351} = 2.473$ ,  $P < 0.05$ ). Therefore, the null hypothesis was rejected. This implied that stakeholders from Federal and State-owned schools did not differ significantly in their perception regarding the best strategies for implementing the National Skills Qualifications Framework for entrepreneurship and sustainable development.



Ho3: There is no significant differences in respondents' perceptions of benefits of implementing the National Skills Qualifications Framework for entrepreneurship and sustainable development based on professional classifications

**Table 7: Summary of ANOVA result showing difference in the mean ratings of stakeholders' perception of the benefits of implementing National Skills Qualifications Framework based on their Professional classifications**

Professional Classification	Number	Mean ( $\bar{x}$ )	SD	F	Sig.	Decision
Lecturers	232	2.85	0.082	0.277	0.989	Ho3 Not Rejected
Students	650	2.90	0.121			
Artisans	348	2.89	0.107			
Industrialist	123	2.87	0.073			

The descriptive statistics (frequency, mean and standard deviation) as presented on table 7 shows lecturers, students, artisans and industrialists have mean scores of 2.85, 2.90, 2.89 and 2.87, and corresponding standard deviation of 0.08, 0.12, 0.10 and 0.07 respectively. The result of analysis of variance as presented in Table 7 reveals that the calculated value of F is 0.277 ( $F_{1349} = 0.277$ ) and the observed probability value is 0.989 which is greater than the fixed probability value of 0.05 ( $P > 0.05$ ). This indicated that the null hypotheses which stated that, there is no significant difference in stakeholders' perceptions of benefits of implementing National Skills Qualifications Framework for entrepreneurship and sustainable development based on professional classifications (student/teacher/artisan/industrialist) was not rejected. This implied that lecturers, students, artisans and industrialists significantly do not differ in their responses regarding the benefits of implementing National Skills Qualifications Framework for entrepreneurship and sustainable development.

Ho4: There is no significant difference in perceived challenges of implementing the National Skills Qualifications Framework for entrepreneurship and sustainable development based on respondents' gender.

**Table 8: Summary of t-test of the difference in the mean ratings of stakeholders on the challenges of implementing the National Skills Qualifications Framework based on gender**

Group	N	Mean	SD	t-cal	Df	p-value	Decision
Male	564	2.99	0.231	5.945	1351	0.000	Ho4 Rejected
Female	789	3.06	0.194				

$P < 0.05$

The data in Table 8 reveals that there are 564 male respondents and 789 female respondents. The responses of male and female stakeholders indicated that female stakeholders had higher mean score ( $\bar{x} = 2.99$ ;  $SD = 0.23$ ) than male stakeholders ( $\bar{x} = 3.06$ ;  $SD = 0.19$ ). Their responses are close to the mean as the standard deviations are very low. The table revealed that there was

significant difference in the mean rating of stakeholders on the challenges of implementing the National Skills Qualifications Framework for entrepreneurship and sustainable development based on gender ( $t_{1351} = 5.945$ ,  $P < 0.05$ ). Therefore, the null hypothesis was rejected. This implies that male and female stakeholders differ significantly in their responses regarding the challenges of implementing the National Skills Qualifications Framework for entrepreneurship and sustainable development.

## Discussion of Findings

The study was carried out to ascertain stakeholders' perceptions of strategies, opportunities and challenges of implementing the National Skills Qualification Framework for entrepreneurship and sustainable development in Nigeria. The study found that the level of knowledge of the stakeholders on the contents of the National Skills Qualifications Framework is very low. This was evident in the result presented in Table 1. The finding that stakeholders possess a low level of knowledge regarding the contents of the National Skills Qualifications Framework (NSQF) highlights a critical gap in awareness and engagement, which poses significant challenges to its effective implementation. This result aligns with earlier studies, such as Adedayo and Olumide (2022), who reported that limited understanding of policy frameworks often leads to underutilization of their potential benefits. Similarly, Aina and Bello (2020) noted that inadequate dissemination of key policy details significantly hinders stakeholders' capacity to integrate such frameworks into their operational practices. The NSQF is designed to serve as a benchmark for assessing skills, competencies, and qualifications, making it a cornerstone for fostering entrepreneurship and sustainable development. However, a lack of knowledge among stakeholders undermines its objectives. This shortfall may stem from ineffective communication strategies, insufficient training sessions, or limited accessibility to relevant documents and resources. For instance, Yusuf et al. (2021) emphasized the importance of structured sensitization programs in bridging such knowledge gaps. Furthermore, the low level of awareness could perpetuate a cycle of inefficiency, where stakeholders fail to utilize the framework for skill development and entrepreneurial advancement. This deficiency might also contribute to resistance to adoption, as people are less likely to support what they do not understand. The result of the hypothesis one shows a further finding that stakeholders do not significantly differ in their responses regarding the level of their knowledge of the contents of the National Skills Qualifications Framework based on the states in which the schools are located.

The study also found that the best strategies include, NSQ training providers selection should be public and transparent and there should be a funding scheme for NSQF to which both government and industry will contribute among others. As revealed in Table 2, this means that the public and transparent selection of NSQ training providers and a joint government-industry funding scheme are pivotal strategies for implementing the National Skills Qualifications Framework (NSQF) indicating the need for collaborative and accountable approaches. Public and transparent selection processes ensure that only credible and competent providers deliver NSQF training, fostering stakeholders' trust. This aligns with the assertion by Okoye and Okojie (2021) that transparency in the selection of service providers enhances program credibility and stakeholder confidence. Additionally, a funding scheme supported by both government and industry emphasizes shared responsibility in implementing the NSQF. This approach addresses the financial constraints that often impede the successful rollout of such initiatives. Adamu and Ibrahim (2020) emphasized that collaborative funding models not only alleviate fiscal pressure on governments but also encourage industry participation in shaping training programs to align

with labour market demands. Furthermore, other strategies as agreed in Table 2 create an enabling environment for skill acquisition and entrepreneurship development. Joint funding ensures the sustainability of the framework, while transparent provider selection ensures the delivery of quality training that meets national and international standards. Adegbite et al. (2022) noted that such measures are instrumental in building a skilled workforce capable of driving sustainable development. Finding of the hypothesis also indicated that stakeholders from Federal and State-owned schools did not differ significantly in their perception regarding the best strategies for implementing the National Skills Qualifications Framework for entrepreneurship and sustainable development.

The study also found that the benefits of NSQF include among others that, it could ease career progression routes, open the door of certification to experienced craftsmen and reduce complexities and ambiguities in TVET as well as narrow gaps between TVET graduates' skills and industry's needs. These benefits indicated that the NSQF's role in fostering a robust skills ecosystem, by addressing key challenges in career progression, certification, and industry corporation, the NSQF paves the way for sustainable development and improved workforce readiness in Nigeria. The finding that the National Skills Qualifications Framework (NSQF) offers benefits such as easing career progression, enabling certification for experienced craftsmen, reducing complexities in technical and vocational education and training (TVET), and bridging skills gaps between graduates and industry needs underlines its transformative potential. The framework serves as a critical tool for supporting education and skills development with labour market demands. Easing career progression routes ensures that individuals can advance effortlessly based on acquired competencies rather than traditional academic qualifications. This approach is supported by Eze and Adediran (2020), who emphasized that competency-based frameworks enhance lifelong learning and provide opportunities for continuous professional development. Moreso, by opening certification opportunities for experienced craftsmen, the NSQF recognizes and validates informal learning, promoting inclusivity and equity in skill recognition. Adeyemi et al. (2021) noted that formal certification of informal skills boosts individuals' employability and earning potential, thereby reducing inequality. Also, reducing ambiguities in TVET enhances clarity and standardization, enabling better understanding and collaboration among stakeholders. Additionally, narrowing the gap between TVET graduates' skills and industry needs addresses a long-standing challenge in education. Umeh and Okafor (2019) highlighted that aligning training outcomes with industry requirements fosters economic growth and reduces youth unemployment. The hypothesis also shows a further finding that lecturers, students, artisans and industrialists significantly do not differ in their responses regarding the benefits of implementing National Skills Qualifications Framework for entrepreneurship and sustainable development.

Finally, the study found that the challenges of implementing the National Skills Qualifications Framework are that NSQF may not fully address the problem of skills mismatch and low public regard for TVET and training outlets may not have all requisite facilities and equipment while funding is a major challenge for NSQF implementation among others. The challenges of implementing the National Skills Qualifications Framework (NSQF), such as its limited capacity to fully address skills mismatches, low public regard for technical and vocational education and training (TVET), inadequate facilities at training outlets, and funding constraints, emphasize systemic issues in the skills development ecosystem in Nigeria. These challenges threaten to undermine the NSQF's potential to drive entrepreneurship and sustainable development. The inability to completely resolve skills mismatches reflects a disconnect between

curriculum design and labour market demands. As noted by Onyekwere and Abdullahi (2020), the dynamic nature of industry requirements often outpaces the ability of training frameworks to adapt, necessitating continuous stakeholder engagement. Similarly, the persistent low public regard for TVET impedes efforts to attract quality trainees and educators to this vital sector. According to Adebayo et al. (2021), societal biases against vocational careers reduce the appeal of TVET and hinder its development. In addition, inadequate facilities and equipment in training outlets are critical barriers, as effective skills acquisition relies on hands-on experience. This aligns with the findings by Odu and Obafemi (2019), who emphasized that under-equipped institutions fail to produce industry-ready graduates. Moreover, funding constraints exacerbate these issues, limiting infrastructure development, training programs, and sensitization campaigns. The results of the hypothesis also indicated that male and female stakeholders differ significantly in their responses regarding the challenges of implementing the National Skills Qualifications Framework for entrepreneurship and sustainable development. The female rated the challenges higher than the male.

## Conclusion

The findings of this study emphasized critical insights into the implementation of the National Skills Qualifications Framework (NSQF) for entrepreneurship and sustainable development in Nigeria. The low level of stakeholder knowledge about the NSQF highlights the urgent need for robust sensitization and training programs to bridge this gap. Transparent selection processes for training providers and a collaborative funding scheme involving both government and industry were identified as essential strategies for successful implementation. These strategies promote accountability, inclusivity, and sustainability. The study also revealed significant benefits of the NSQF, such as easing career progression, certifying informal skills, standardizing TVET, and aligning graduates' skills with industry needs. However, challenges such as skills mismatches, societal biases against TVET, inadequate training facilities, and funding constraints jeopardise its effectiveness. Addressing these challenges requires targeted investments, increased public awareness, and dynamic stakeholder collaboration. The NSQF holds immense potential to transform Nigeria's skills development landscape if these issues are comprehensively addressed.

## Recommendations

Based on the findings and conclusion, the following recommendations were made:

1. The government, in collaboration with educational institutions and industry stakeholders, should organize regular workshops, seminars, and awareness campaigns to improve stakeholders' knowledge of the National Skills Qualifications Framework (NSQF). This will ensure greater understanding, acceptance, and participation in its implementation.
2. To enhance the credibility and effectiveness of NSQF implementation, the selection of training providers should be conducted through a public, transparent, and merit-based process. This approach will ensure that only competent and well-equipped providers are entrusted with delivering high-quality training.
3. The government and private sector should establish a joint funding scheme for the NSQF. Such collaboration will ensure adequate financial resources for infrastructure development, the acquisition of modern training equipment, and the sustainability of the framework's programs.

4. A national campaign should be launched to elevate the public perception of technical and vocational education and training (TVET). This includes integrating TVET success stories into media narratives, engaging influential community leaders, and revising educational policies to emphasize the importance of vocational careers in driving economic growth.

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