

Higher education gender analysis: access to employability and entrepreneurship opportunities

Sub-Saharan Africa: Nigeria

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Abbreviations

AGEE	Accountability for Gender Equality in Education
BMAS	Benchmark Minimum Academic Standards
CCMAS	Core Curriculum and Minimum Academic Standards
ICT	information and communications technology
MAS	Minimum Academic Standards
NCE	National Certificate in Education
NPGBE	National Policy on Gender in Basic Education
NUC	National Universities Commission
SIWES	Student Industrial Work Experience Scheme

Executive summary

This study explored the barriers and challenges facing students – especially female students – in Nigerian universities, focusing on how these affect access to entrepreneurship and employability opportunities for female students. As well as identifying the main challenges and barriers female students in Nigerian universities face, the study shows some of the efforts being made by various actors to respond to these. It also highlights best practice adopted by some of the institutions to respond to the challenges. The study took a multimethod and intersectional approach due to the multifaced nature of the challenges facing female students in their institutions and the growing complexity in our contemporary society in general. The study notes that there are several barriers and challenges facing female students in Nigerian universities and that the government and the education institutions themselves have been involved in efforts aimed at ameliorating these challenges. The study notes, however, that these efforts are not adequate. In several cases, they were not well coordinated and not fully implemented, and in most cases the students were not aware of them. Based on these developments, the study highlights the best practice and innovations that have been adopted by some of the universities, which could eliminate some of these barriers. The study concludes with some recommendations, which are a call to action for the main stakeholders, including education institutions, governments, private sector partners and international development partners

The main findings are as follows:

- Female students in Nigerian universities continue to face challenges in accessing entrepreneurship and employability opportunities. These range from sexual harassment/intimidation and bribery to organisations refusing to hire women because of their marital status, gender-based stereotypes, cultural and societal norms, among others.
- Some universities in Nigeria have introduced training programmes on entrepreneurship, but these have not realised their full potential and are not accessible to all students.
- Policies on gender exist at both national and institutional levels, but most of these have not been implemented. Students had little awareness of the existence of these policies and their impacts. There is, therefore, a disconnect between policy and practice.
- Nigerian universities face myriad challenges, including poor funding, weak governance, poor quality of programmes and poor student services. This affects the support they provide to students, including for entrepreneurship and access to employability opportunities.
- University–industry/private sector links remain weak and poorly developed. Some of the universities that participated in the study are located in regions far from major industrial centres. A few universities were benefiting from improved engagement with industry.



- Curriculum reform and innovation have been slow and have not kept pace with societal demands and changes. Students generally called for a review of training programmes and integration of new developments, including opportunities from digitalisation.
- Cultural beliefs and deep-seated social norms continue to pose challenges and barriers for female students. Some of these cultures perceive female students as less suited for some courses, especially in STEM subjects, and subject them to early marriage and culturally assigned roles – female care-based roles at home are still deep-seated in society. This was seen to be prevalent in the north. These continue to constitute barriers to women's participation in higher education.
- Graduate unemployment, especially among female graduates, is a growing challenge, almost becoming a crisis, and needs urgent redress.

The study identifies several strategies that could be implemented to lessen these challenges as we move to the future. These include development and implementation of supportive policy frameworks and legislation on female students in universities and on workplace ethics to counter discrimination against female students. There is also need for mechanisms for provision of adequate funding targeting women, including to support their engagement in entrepreneurship. There is need for advocacy programmes to help encourage female participation in university education and to debunk detrimental cultural constructions against female students. Other strategies include involvement of female students in practical training, ensuring confidence-building mechanisms in the university programmes, and community engagement to encourage women's participation in entrepreneurship and employment opportunities. International communities are seen as vital in reducing gender inequality by providing financial support, advocacy, capacity building and technical resources. Based on the above, the study makes the following recommendations:

- Strengthen policy frameworks both nationally and within institutions:** There should be policies that are specific to female students in higher institutions in Nigeria, since there are still social/societal norms that hinder their education. Every university should have a well-established policy framework for the promotion of education of female students.
- Improve institutional support systems:** Universities should provide intervention programmes that are targeted at building students' capacities and assertiveness so that they will be able to handle emotional challenges they face when standing against cultural practices that hinder their participation in university education, entrepreneurship and employment.



- Provide funding opportunities for entrepreneurship:** Government, high education institutions and international development partners should collaborate to provide funds for students to support start-ups/businesses so that they can put to practice the relevant skills they acquired during their university training.
- Promote entrepreneurship education:** Universities should ensure that students are systematically exposed to entrepreneurship education throughout the duration of their studies. They should adopt policy measures to promote entrepreneurship among students and provide financial assistance and mentoring. Entrepreneurship programmes in the universities should go beyond emphasis on vocational skills.
- Collaborate with employers:** University administrators should enter collaborations with employers to eliminate gender-based obstacles to employment.

1 Introduction

Gender inequity has been a major challenge and policy concern in Nigeria’s higher education institutions (Okeke, 2022). It has been noted that women are under-represented in both student and staff categories in Nigerian universities. While girls and women navigate gruelling academic and socio-economic terrains in their societies, as students in higher education institutions, women are often met with similar daunting challenges. In the 2018/2019 academic year, women accounted for 44 per cent of the total student population in Nigerian universities (Statista, 2022). In 2021, the Federal Government of Nigeria developed a comprehensive gender policy to tackle the challenges and discrimination faced by women in Nigerian universities. The ambitious policy aimed to eliminate gender barriers in higher education by 2025. However, it has not borne much fruit. Women still face the perennial challenges of unequal access, funding and representation, and other forms of discrimination continue to confront women in the higher education system. The effects of these challenges include unequal access to entrepreneurship and employment opportunities, the focus of this report, which presents the findings from a study exploring the challenges and barriers female students in Nigerian universities face.

1.1 Objectives and scope of the study

The study had the following objectives:

- i. to produce a Nigeria country report on gender inequality focusing on barriers and challenges faced by female students and graduates in accessing and participating in employability and entrepreneurship opportunities
- ii. to identify recommendations on steps the British Council can take to ensure that efforts to resolve gender-based challenges are better integrated into the higher education programmes offered in Nigeria
- iii. to consider the broader role of higher education in contributing to improved gender equality for students and graduates and to develop recommendations for our higher education sector partners and stakeholders, citing gender-sensitive or transformative approaches and best practice for tackling gender inequality.

Based on these objectives, the study explored the barriers facing female students in Nigerian universities with a focus on access to entrepreneurship and employability opportunities. It analysed the national higher education context, structure, existing policy frameworks, support systems and developments relating to gender in the higher education sector. It further explored higher education structures related to access, funding, institutional policies and support systems. The study adopted an intersectional approach that considered how aspects of identity such as ethnicity, religion and economic status intersect with gender and can exacerbate inequalities within the higher education sector. It thus highlights the experiences of female students and the inherent biases and barriers they face from the lens of intersectionality. It also highlights best practice and innovative approaches being developed in some of higher education institutions to respond to these challenges.

1.2 Methods

The study was based on a multimethod approach comprising a desk/document review, a questionnaire survey, interviews and focus group discussions. Due to the nature of the study and the size of the Nigerian higher education system, 11 universities representing the diversity of the Nigerian higher education sector were purposively selected. The institutions had a broad range of characteristics including public/private; old/new; big/small; and in terms of location, urban/rural/region. The selected institutions may not fully capture the diversity within the Nigerian higher education system, but they can be taken as a fair reflection of the types of institution that exist in the country. The selected institutions, shown in Table 1, includes seven public universities, three private ones and one run by a not-for-profit organization.

Table 1. Nigerian universities participating in the study

N	Institution	Type/ownership	Geopolitical zone (location)
1	Pan African University Institute of Life and Earth Sciences (Including Health and Agriculture) (PAULESI)	Governments (Heads of State and Government of the African Union)	Southwest
2	Lagos Business School	Not-for-profit (Pan-Atlantic University Foundation)	Southwest
3	University of Benin	Federal university (Federal Government of Nigeria)	South-South
4	University of Medical Sciences, Ondo	State university	Southwest
5	Coal City University, Enugu	Private university	Southeast
6	Godfrey Okoye University, Enugu	Private university (mission)	Southeast
7	Nnamdi Azikiwe University, Awka	Federal university (Federal Government of Nigeria)	Southeast
8	University of Port Harcourt	Federal university (Federal Government of Nigeria)	South-South
9	Tai Solarin University of Education, Ijebu-Ode, Ogun State	State university	Southwest
10	Paul University, Awka, Anambra State	Private university (mission)	Southeast
11	Aliko Dangote University of Science and Technology	State university	Northwest

Next, a brief description of the data collection approaches used for this study is provided.

1.2.1 Desk/literature review

The desk/literature review aimed to collect, collate and analyse relevant literature on Nigeria’s higher education sector. It focused on a number of aspects, including: a brief history of the higher education system; the main developments and transformations in recent years; the principal policy developments, especially relating to gender-based challenges in the higher education sector; developments in access, funding and quality of the system; and the learning environment and support systems for students. The review analysed government policy documents, position papers, strategic plans, strategy documents and policy frameworks with implications for gender, employability and entrepreneurship. Institutional policies and strategies were also included. Attention was also given to some of the universities that have participated in the British Council’s Innovation for African Universities programme. The analysis of institutional documents covered: the context, history and development of institutions; institutional policies and strategies; information on funding and access, especially with regard to female students;

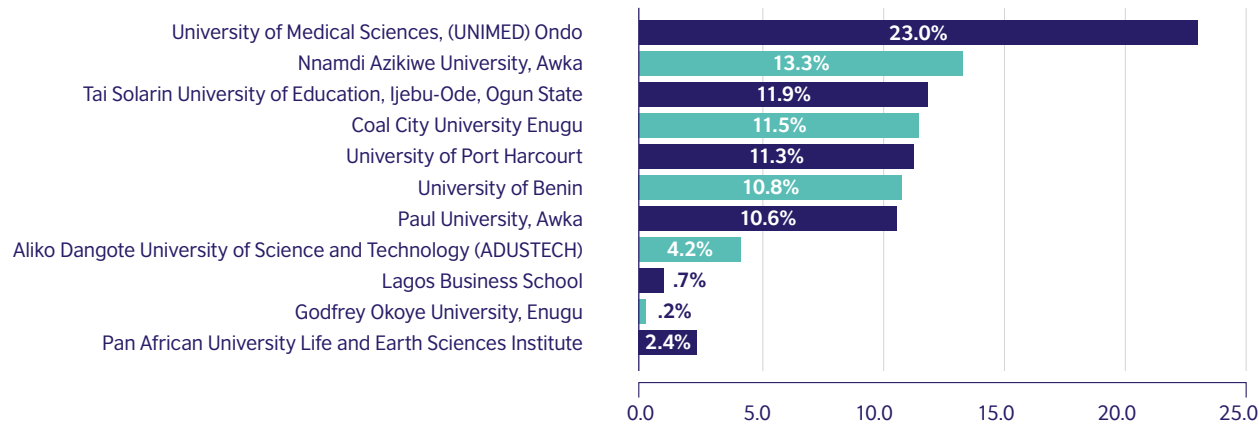
the support systems for students, especially women; studies on the barriers and challenges faced by female students; and opportunities for entrepreneurship/private sector engagement for female students. The literature also looked into factors that help to create an enabling environment for young women and men in universities to tackle the challenges and barriers so as to reduce gender inequality and contribute towards improving outcomes for female students and graduates in Nigeria.

1.2.2 Questionnaire survey

The second data collection approach was a questionnaire survey completed by students from the selected universities. The aim was to gather data on their attitudes and experiences related to the gender challenges and barriers within the institutions and their societal contexts in regard to their access to employability and entrepreneurship opportunities. Male students were included to ascertain if they perceived the same barriers as their female counterparts. The goal for the sample was at least 50 students from each of the 11 institutions. The total response was 460 students, which represents a 92 per cent response rate based on the goal set.

Figure 1 shows the distribution of respondents across the institutions. The largest share was from the University of Medical Sciences (23.0 per cent), followed by Nnamdi Azikiwe University, Awka (13.3 per cent), and Tai Solarin University of Education, Ijebu (11.9 per cent).

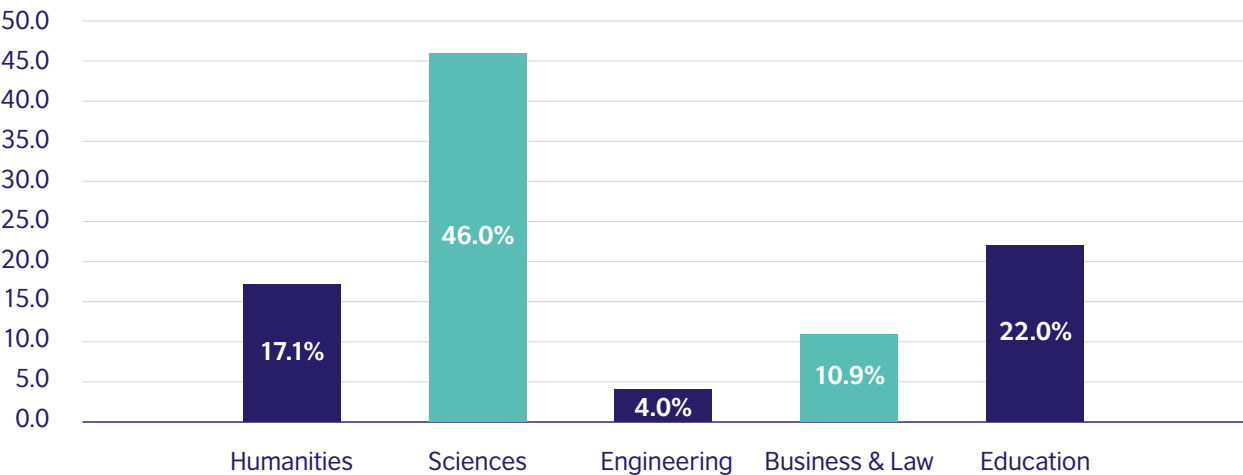
Figure 1. Distribution of respondents by institution



A total of 290 of the respondents (63.04 per cent) were women, 168 (36.52 per cent) were men, other is 2 (0.44 per cent). The majority of the male students were 24 years old, while the majority of female students were 22 years old. The oldest student was 62. It was observed that all the students were Nigerian citizens. Only 2 per cent reported that they have disabilities. Most of the respondents were undergraduates, and 30.9 per cent of this group were undergraduates in their second year, 30.1 per cent were in their fourth year of study, 20.6 per cent were in their first year and 18.4 per cent were in their third year. Among the postgraduate students in the sample, 28.8 per cent were in their first year, followed closely by 27.1 per cent in their second year. Of the 168 male respondents, 81.4 per cent were undergraduates and 18.6 per cent were postgraduates. Similarly, of the 290 female respondents, 87.2 per cent were undergraduates and 12.8 per cent were postgraduates.

As shown in Figure 2, Most of the students who participated (46.0 per cent) were registered on courses in Sciences, and this was followed by Education (22.0 per cent), Humanities (17.1 per cent), Business and Law (10.9 per cent) and Engineering (4.0 per cent). Further analysis showed that for most fields of study, there were more female respondents. Out of the 77 students who were registered on Humanities courses, 68.8 per cent were women and 31.2 per cent were men. For respondents on Sciences courses, 62.3 per cent were women and 37.7 per cent were men. In Education, 72.7 per cent were women and 27.3 per cent were men. Slightly more than half of students (55.1 per cent) in Business and Law were women, while 44.9 per cent were men. Finally, However, in Engineering, there were more men (66.7 per cent) than women (33.3 per cent).

Figure 2. Respondents' field of study



1.2.3 Interviews

Interviews were carried out with 29 stakeholders in the participating universities, including university leaders, deans, heads of department and heads of units offering student services. The interviews were undertaken virtually and lasted an hour on average, and they were recorded (with consent of the interviewees). The aim was to gain an understanding of the institutional contexts and how they related to gender barriers and challenges. The institution leaders provided information on institutional policies, gender frameworks and opportunities to boost student employability and entrepreneurship. They gave further insights into some of the challenges facing the institutions, the challenges facing the students, especially women, and the support systems that the institutions were putting in place as solutions to these challenges.

1.2.4 Ethical considerations

The study adhered to ethical standards, including maintaining anonymity of the respondents and confidentiality of responses. Participation in interviews and consultative meetings was voluntary – that is, no respondents were ‘coerced’ to participate in this process. Detailed information concerning the research objectives and procedures was provided for the participants. The relevant consent was obtained from participants before undertaking research.

1.2.5 Data analysis

The data for this study was analysed using various approaches depending on the nature and type of data. Data from the literature review was analysed using thematic categories, focusing on the themes relevant to the study. In this way, we undertook fair and critical analysis of the literature, including policy documents, and synthesised the information relevant to the components of this study. The data generated from the interviews and document review was analysed using appropriate tools, including a matrix for recording evidence according to the research themes and priorities, to help summarise the evidence related to the main aspects of the study. The interview transcripts were analysed thematically to generate deeper insights and contextual understanding of a broad range of relevant topics, including the national and institutional policies and frameworks on gender and youth employability and the challenges and barriers that exist for students. These were to enable generation of robust explanations, propositions, patterns, themes and insights to answer the research questions and fulfil the objectives of this study. Verbatim quotes from interviews and focus group discussions were used to illustrate the main findings. Further, quantitative analysis of survey data was carried out using the Statistical Package for the Social Sciences (SPSS).

1.3 Gender analysis framework

The various frameworks for gender analysis were considered, and the research adopted the Accountability for Gender Equality in Education (AGEE) framework, which has proved useful for similar studies. The AGEE framework is considered useful for exploring complex gender-based challenges and injustices in higher education. It provides a holistic approach that aligns with the focus on intersectionality in this study.

AGEE assesses gender inequalities and barriers according to six domains: resources, (money, policies, administrators, schools/institutional support systems and information); values, opportunities (factors that enable or constrain gender equality and how these factors can be converted into opportunities); participation (how factors such as socio-economic status, location, race and ethnicity affect men and women); knowledge, understanding and skills; and outcomes (gender equality in all facets of society, including education, employment, access to healthcare, economic and political opportunities). This makes AGEE a robust intersectional model, and the domains map well onto the topics explored in this study.

The six dimensions of AGEE, shown in Figure 3, help in assessing the level of freedom and opportunities individuals have to convert specific resources into functioning and capabilities – that is, what they have been able to achieve as a result of their educational achievements. This links to the question of and access to employment and entrepreneurship opportunities that is at the core of this study. The framework further incorporates the social contexts and arrangements that affect the distribution of resources which influence the choices individuals make. This links to the social constructions and cultural norms, stereotypes and barriers that women – in this case, female students in Nigerian universities – must navigate. The model brings forth new ways of thinking about gender inequalities in higher education by targeting multiple explanatory factors.

AGEE Framework



Figure 3. The AGEE Framework (Unterhalter, et al., 2022)

The AGEE framework was used to frame questions concerning student experiences, institutional practices and social policy contexts in Kenya, especially on how the six domains influence gender (in)equality discourses in Kenya's higher education sector. AGEE is suitable for this study as it links to the intersectional approach (Crenshaw, 2017) to gender inequality, which recognises the complex and multifaceted nature of gender-based challenges and barriers. The framework moves away from a focus on a single axis, or dimension, of [in]equality, arguing for the need to interrogate multiple intersectional factors. It further allows for interrogation of policy-related questions and gaps and how social positioning and power relations inform our understanding of the gender-related barriers female students face in Kenya's higher education institutions.

We also reviewed the British Council's Gender Equality in Higher Education: Maximising Impacts document (Mott, 2022) and the organisation's theory of change. Four critical components were singled out. These are fair access to resources and opportunities, a supportive legal and policy environment, changes in attitudes and social norms, and increased awareness and agency among women and girls. In this study on the barriers and opportunities for entrepreneurship and employment for female students in universities in Nigeria, these components were employed to help identify ways tackle gender inequality in higher education.

First, the study explored the concept of fair access to resources and opportunities by investigating the educational and financial resources available to female students. Research indicates that female entrepreneurs often face significantly more barriers in accessing capital and financial support compared

to their male counterparts (Dawa et al., 2021). By examining the availability of scholarships, grants and entrepreneurial training programmes designed specifically for women, the study sought to identify gaps in resource allocation with the hope of proposing targeted interventions. For instance, programmes that improve financial literacy and provide mentorship could enable female students to navigate the entrepreneurial landscape more effectively (Manzanera-Ruiz et al., 2022).

Second, the legal and policy environment is crucial for fostering gender equality in entrepreneurship. The study analysed the policies that affect female students' access to entrepreneurship and employment opportunities. For example, it assessed the effectiveness of policies promoting gender equity in education and entrepreneurship, such as affirmative action initiatives or gender-sensitive curricula (Langevang & Gough, 2012). By highlighting some of the best practice and identifying areas for improvement, the study advocates for change that creates a more enabling environment for female students.

Third, the study examined the need for change in the attitudes, beliefs and discriminatory social norms hindering women's participation in entrepreneurship. Research has shown that societal expectations often dictate the roles women play, which can limit their aspirations and opportunities (Langevang & Gough, 2012). By investigating the cultural perceptions surrounding female entrepreneurship and employability, this study sought to identify specific social norms that must be challenged. This could involve engaging with institutional and community leaders and stakeholders to promote positive narratives about women's capabilities and contributions to the economy.

Fourth, awareness and agency among female students are emphasised in the study's theory of change. Exploring how awareness of entrepreneurial opportunities and resources affects female students' intentions to start a business or pursue a career in various fields is a critical undertaking. For instance, it is essential to examine the role of entrepreneurship education in shaping students' perceptions of their capabilities and the feasibility of starting ventures (Mshenga et al., 2020). By assessing the effects of entrepreneurship programmes and workshops, insights can be provided on how to improve female students' confidence and agency in pursuing entrepreneurial paths.

Additionally, the study examined the influence of social networks on female entrepreneurship. Research suggests that social capital plays a significant role in entrepreneurial success, as networks can provide access to resources, information and support (Dawa et al., 2021). By examining the role of peer networks, mentorship programmes and community support systems for female students, the study highlights the importance of fostering collaborative environments that help build capacity among this group. This could involve creating platforms for networking and knowledge-sharing among aspiring female entrepreneurs (Court & Ariekpar, 2022).

Finally, the study emphasises the importance of continuous monitoring and evaluating to promote gender equality in entrepreneurship and employability. By establishing clear metrics for success and regularly assessing the effectiveness of interventions, stakeholders can ensure that efforts to support female students work well and are responsive to their needs (Manzanera-Ruiz et al., 2022). This commitment to accountability will not only improve the effectiveness of gender equality initiatives but also foster a culture of inclusivity and of building women's capacities in higher education.

In conclusion, applying the British Council's theory of change to this study on the barriers and opportunities for female students in universities of Nigeria required a comprehensive approach that considered, among other things, access to resources, legal and policy frameworks, social norms, and strengthening of female students' capacities. By focusing on these areas, the study hoped to contribute significantly to promoting gender equality in entrepreneurship and employability.



In conclusion, applying the British Council's theory of change to this study on the barriers and opportunities for female students in universities of Nigeria required a comprehensive approach that considered, among other things, access to resources, legal and policy frameworks, social norms, and strengthening of female students' capacities. By focusing on these areas, the study hoped to contribute significantly to promoting gender equality in entrepreneurship and employability.

2 Higher education in Nigeria: A brief overview

Nigeria is an important regional player in West Africa and accounts for about half of the region's population, with approximately 216 million people (National Bureau of Statistics, 2022). It has the largest economy and population in Africa. Nigeria is a multi-ethnic and culturally diverse federation consisting of 36 autonomous states and the Federal Capital Territory. It is blessed with abundant natural resources, with oil being the mainstay of the economy (Okeke, 2022; World Bank Group, nd).

Nigeria recognises the importance of higher education in national development (Okeke, 2020), which is based on the pivotal role of higher education in human resource development and generation of new knowledge and innovations (Okereke & Ekpe, 2002; Thomas et al., 2014) to respond to societal challenges. Based on this, the Federal Ministry of Education (2014) recognises and categorises various types of tertiary education as universities, colleges of education, polytechnics and monotechnics. The policy further specifies the objectives of tertiary education in Nigeria, which are: to promote national development by providing advanced training; to instil positive societal values; and to cultivate intellectual competencies and abilities to be responsive to the needs of societies while at the same time promoting national and international understanding.

Higher education in Nigeria has witnessed a number of stages from the colonial era to contemporary times (Okoro & Agugum, 2017). The development of higher education in Nigeria can be traced to 1932, when Yaba Higher College was established (Babarinde, 2012). This was followed by the establishment of the University College Ibadan in 1948 as the first university college. On attaining independence in 1960, what are today regarded as first-generation universities in Nigeria were introduced. These are the University of Nigeria, Nsukka (1960); Ahamdu Bello University, Zaria, the University of Lagos and the University of Ife (1962). The University of Benin was subsequently established in 1970 (Abdulrahman, 2017), followed by seven second-generation universities, established in 1975 at Jos, Maiduguri, Sokoto, Kano, Ilorin, Calabar and Port Harcourt.

Furthermore, a number of factors, including the need to address the shortfall in manpower, the limited carrying capacities of existing universities, and agitations arising from newly created states in the country, led to the establishment of more universities (Adeyemo, 2000). The next couple of years witnessed a growth in the number of universities in Nigeria. Over the same period, private higher education has also flourished in Nigeria. While Nigeria had 13 universities in 1977, by 2013, the number had grown to 128, and by 2024, it had grown substantially to 274. Of these, 149 – more than half – are private universities. The distribution of these universities is presented in Table 2.

Table 2. Number of National Universities Commission-accredited universities by type, 2021–2024

Type	2021	2022	2023	2024
Federal universities	45	46	51	62
State universities	54	60	62	63
Private universities	99	111	147	149
Total	198	217	260	274

Sources: NUC, 2022, 2023b, 2024 and Tolu-Kolawole (2023)

2.1 Main developments and transformations

As noted, the Nigerian higher education sector has grown tremendously in recent years, largely due to the high demand for higher education. This has led to a sharp rise in student enrolment, and there is increasing diversity in universities' offerings to accommodate the demands of students. This expansion has outstretched the capacities of the institutions, especially the human and infrastructural resources, with most institutions seeing effects on the quality of their services and products (Subair et al, 2012). Until the 1980s, the standards and performance of the Nigerian higher education (represented by the university system) compared favourably with those of the best universities in other parts of the world. In recent years, the universities have suffered neglect and seen multiple negative effects (Garba, 2020), resulting in a system that is facing challenges in responding to the current concerns and future needs of the country (Babarinde, 2012). The number of non-teaching staff is astonishing given that institutions are slow in adopting new and innovative teaching and learning approaches. Available sources indicated that while in 2013 there were 37,504 academic staff, there were 77,511 non-academic staff, with only 43 per cent of academic staff holding doctoral qualifications (International Organization for Migration, Abuja, Nigeria, 2014).

The system has undergone several transformations, most of which involved government efforts in various committees and commissions, including the Elliot Commission of 1943 and the Ashby Commission of 1960 (Osokoya, cited in Ogunkunle & Adekola, 2014). The Ashby Commission Report was followed by various regional governments commissions, including the Banjo and Taiwo Commissions (for the Western region), the Ikoku and Dike Commissions (for the Eastern region) and the Oldman Commission (for the Northern region). The recommendations of these regional commissions led to the 1969 National Curriculum Conference (Njoku, 2018) which had historic effects (Akanbi & Abiolu, 2018) resulting in the National Policy on Education (NPE) in 1977, the first indigenous education policy. This policy outlined the philosophy and goals of education in an independent and democratic Nigeria. It was revised in 1981, 1988, 2004 and 2013. The sixth edition of the policy, produced in 2013, documented broad goals of university education in terms of developing high manpower, ensuring the all-round development of students and incorporating entrepreneurship skills and competences. It emphasised the need to promote indigenous knowledge, science and technology (a substantial portion of the expenditure shall be on Science and Technology, with no less than 60 per cent of students allocated to science-based courses in conventional universities and no less than 80 per cent in universities of technology and agriculture) (Federal Ministry of Education, 2013).

The Federal Government set up the National Universities Commission (NUC), which supervises university education in Nigeria to ensure that the goals for this education are met. The NUC has developed several policies, including the Minimum Academic Standards (MAS), which were developed in 1989 and revised in 2007 following changing dynamics occasioned by global competitiveness and the effects of information and communications technology (ICT). One of the limitations of the MAS was that it was content-based, leading to prescriptivism, hence the need for an outcome-based standard that would be in line with global best practice. This resulted in the merger of the Benchmark Style Statements and the revised MAS into the Benchmark Minimum Academic Standards (BMAS), described as

an amalgam that crisply enunciates the learning outcomes and competences expected of graduates of each academic programme without being overly prescriptive while at the same time, providing the requisite flexibility and innovativeness consistent with a milieu of increased institutional autonomy. (NUC, 2007, p. 2)

As part of the recent developments, the BMAS is being replaced with the Core Curriculum and Minimum Academic Standards (CCMAS) for Nigerian Universities 'to reflect the 21st Century realities, in the existing and new disciplines and programmes in the Nigerian University System' (NUC, 2023a, p. 6). There was reduction in the number of general courses in the university curriculum and then the inclusion of entrepreneurship courses such as 'Venture Creation and Entrepreneurship'. It also structured programmes to provide for 70 per cent of core courses for each programme, while allowing universities to use the remaining 30 per cent for other innovative courses in their peculiar areas of focus (NUC, 2023a). Though some disciplines in both the CCMAS and BMAS have gender concerns integrated into them, it appears that appropriate attention was not given to gender issues across the board, particularly in General Studies, to help eliminate gender inequities in Nigerian institutions. The CCMAS has been criticised by many academics, including by the Academic Staff Union of Universities, who claimed it has taken away university autonomy.

Apart from the challenges and transformations related to academic quality discussed here, funding is another major challenge facing the system, rendering running the universities an incredibly difficult task. Whereas public universities depend to a great extent on government (federal and state) funding because they do not charge fees, private universities that charge fees often find these are insufficient and require additional support from other sources (NUC, 2019). The Federal Government has made efforts to fund the universities via special intervention funds under the Tertiary Education Trust Fund. The Fund is mainly used for expansion of infrastructure and for supporting human resources in the universities via local and international scholarships, workshops and conferences. Currently, these funds are not available for private universities in Nigeria.

Overall, university education in Nigeria has seen developmental strides mixed with challenges arising from non-implementation of most policies. However, it is geared towards developing high-level personnel that can solve local and global problems.

2.2 Employability opportunities for Nigerian graduates

There has been increased enrolment to tertiary education in Nigeria and, correspondingly, more graduates from Nigerian universities. However, Nigerian graduates face a Herculean task of securing jobs in Nigeria despite having higher education qualifications. This arises because of persistent economic problems in Nigeria, and the mismatch between young people's career aspirations and their actual employment, resulting from poor knowledge and skills regarding the labour market and professions (Galeotti et al., 2022). The Federal Government of Nigeria has realised this and came up with a series of policies and plans to arrest the continuous economic hardship, including the recent Economic Recovery and Growth Plan 2017–2020, which is aimed at long-term inclusive growth from structural economic change, focusing on public and private sector efficiency to increase productivity and economy diversity. The initiative seeks to lay a firm foundation for future generations by ensuring Nigerian youth are ready to lead the country's prosperity (Ministry of Budget & National Planning, 2017). The Plan recognises the development of human capacities via education, including tertiary education, as a crucial pathway to realising its objectives. This underscores the place of university education in guaranteeing employment opportunities for Nigerian youths.

There is recognition that there exists a missing link between industry and Nigerian universities. Adebakin et al. (2015) have demonstrated that the employability skills required of Nigerian graduates differ from the skills they possess. Employers expect university graduates to have skills in analytic and problem-solving (98.0 per cent), decision making

(98.3 per cent), risk management (96.7 per cent), leadership (98 per cent), information and communication technology (97.7 per cent), teamwork (99.0 per cent), official communication (97.7 per cent) and English proficiency and literacy skills (97.0 per cent). University graduates, on the other hand, possess skills in English proficiency and literacy (58.0 per cent). Inadequately preparing Nigerian undergraduates for the world of work has resulted in pressure on higher education institutions to focus more on employability programmes and experiences (Galeotti et al., 2022). For example, under President Obasanjo, with International Labour Organization support, Nigeria integrated entrepreneurship education into tertiary curricula, establishing Entrepreneurship and Skills Development Centres to boost students' employability by providing training, competitions and talent programmes, fostering entrepreneurial skills and enterprise creation (Adeyemo et al., 2010; Galeotti et al., 2022).

Consequently, some practices that have centred on employability include Careers Centres/a Centre for Counselling and Career Development/a Career Services and Linkages Unit established in Nigerian universities, including Nnamdi Azikiwe University, Awka, Pan-Atlantic University, Coal City University and the University of Ibadan. These centres aim to boost students' employability and career aspirations. Some Nigerian universities have established innovation incubation centres and ICT hubs to improve students' employability. Nnamdi Azikiwe University had the Afri-Hub centre and Chike Okoli Entrepreneurship centre; the University of Port Harcourt had the ICT Innovation and Incubation Park. In University of Benin, there are a number of trainings/collaborations and centres targeted at improving students' employability skills, such as: the Opolo Global Innovation Hub; Engagement with Google Developer Group Benin; Data Analysis IT Programme; Meeting on Innovation and Community Sustainability; Digital Skills Section at the Faculty of Pharmacy; Nurturing of Talents and Community Incubation; and Hackathons and Free Tech Training Programmes. All Nigerian Universities have the Student Industrial Work Experience Scheme (SIWES) for students in science, technology, and vocational-related courses as well as the Teaching Practice exercise for students in teacher education faculties, aimed at preparing students for the world of work.

Importantly, employability opportunities are affected by gender in Nigeria, with men more likely to be employed than women. Early marriage and family formation are critical factors in women's access to jobs, which is worse for young women from poorer households than for other women; women in Nigeria are less likely to participate actively in the labour market and more likely to engage in lower-paying roles, such as farming and informal jobs, and they tend to earn less than men with comparable education and experience levels (Enfield, 2019). However, training can help women overcome self-defeating social norms (Croke et al., 2017).

3 Gender challenges in Nigeria's higher education

In Nigeria, gender equity in higher education has become a significant policy question due to recognition of the challenges women face (Okeke, 2022). Despite the progress that has been made, women are still under-represented in both student and staff categories. In 2009, only 15.7 per cent of academic staff were women, with female professors comprising just 6.9 per cent of the total. Most of them were in the Humanities. Among non-academic staff, about 45 per cent were women (Ogbogu, 2009). Evidence has shown that not much has changed since 2009. For example, of the 73,443 academic staff in Nigerian universities in 2019, 56,063 were men and 17,380 were women. Women accounted for only 17.2 per cent of principal officers in Nigerian universities (NUC, 2019).

Some of the universities, such as Obafemi Awolowo University, are beginning to take steps to deal with these disparities. In a partnership with the Carnegie Corporation, in the Gender Equity Project, the university implemented scholarships, fellowships, sensitisation workshops and outreach programmes for the women in the university, aiming to close the gender gap. The Centre for Gender and Social Policy Studies developed a Gender Policy to institutionalise equity across university life, aiming to promote gender equity, organisational effectiveness and human rights. This initiative has established the university as a leading gender-equitable institution in Nigeria. Additionally, a good number of Nigerian universities now have gender studies centres, which serve as tools for mainstreaming gender in university administration (Adebayo, 2022; Igiebor, 2022).

Due to the gender disparities, several girls and even boys are deprived of opportunities to undertake university education and gain the knowledge and skills to enable them to lead fulfilling and productive lives. This is in addition to disparities in completion rates for those who manage to get into university (Federal Ministry of Education, 2021). Challenges facing girls in accessing quality education led to the development of the National Policy on Gender in Basic Education (NPGBE) and its Guidelines in 2006, which aimed to bring about gender equality at the basic education level. However, during the NPGBE implementation, it became clear that gender concerns exist not only in basic education, but also at post-basic and tertiary levels of education.



The NPGBE aims to achieve an equitable, high-quality and accessible tertiary education system that is gender responsive (Federal Ministry of Education, 2021). It seeks to: mainstream and institutionalise gender equity and social justice concerns in all existing higher education laws, statutes and policies; establish Gender Management Systems, Gender Management Information Systems and gender centres for effective coordination of gender-related issues, including research and scholarship; mainstream gender-based concerns in academic curricula across disciplines, where relevant; and promote gender balance in leadership and decision-making positions in tertiary institutions. Other objectives are to: promote a gender-responsive learning and work environment, paying particular attention to safety and security concerns on campuses; strengthen institutional structures and support services to eliminate sexual harassment and other gender-based harms; ensure regular gender-sensitive evidence-based planning, monitoring and evaluation in tertiary institutions; and encourage gender-based research, evidence and innovations in tertiary institutions.

The policy advocates for: the review of existing higher education laws, statutes and policies in accordance with the principles of gender equity and social justice; the development of gender equity and social inclusion policy, as well as sexual harassment guidelines; the development of frameworks for

mainstreaming gender into existing academic curricula and ensuring that new programmes are gender-responsive; the building of academic and non-teaching staff capacity in gender analytical skills and knowledge for mainstreaming gender into programmes; the development and implementation of gender-responsive leadership and mentoring programmes for staff and students across departments and units, and in particular for women in science and technology programmes; the strengthening of delivery of gender-responsive health services in teaching hospitals and health centres/clinics to meet the gender needs of staff and students; and the investment in childcare facilities on campuses for the benefit of staff and students.

It also aims to formulate and implement gender-sensitive and inclusive policy guidelines on accommodation, learning structures and administrative facilities; advocate for gender-responsive accommodation provided by private owners outside the campus; and engage school management on how to partner with financial institutions to provide gender-targeted loan revolving schemes, work experience and stipends to assist students from poor socio-economic backgrounds. It advocates for institutions to establish gender-responsive budgeting systems and mobilises institutions to develop gender-specific indicators to monitor and evaluate progress of gender mainstreaming on an annual basis. It further aims to sensitise and support institutions to conduct gender-focused research and disseminate findings in publications; implement a policy of zero tolerance of sexual harassment, gender-based violence, cultism and other harms in tertiary institutions in accordance with the Violence Against Persons (Provision) Act and other relevant laws; and strengthen counselling and psychosocial support services for members of school communities. However, researchers (Igiebor, 2022) are of the view that despite the raising of awareness and the establishment of gender centres in Nigerian universities, institutionalising gender equity remains a challenge. Igiebor's (2022) findings shows clearly that the presence of gender centres without contextualising gender policies in some Nigerian universities leads to institutional resistance. These policy developments are discernible not only at the national level but also at institutional level.

3.1 Funding and access challenges

Disparities in access have characterised the higher education system in newly independent African countries since its formative stage in the 1960s (Ghose, 2017). In May 1961, during the United Nation's Universal Declaration meeting held in Addis Ababa, Ethiopia, a goal was set to achieve universal primary education in Nigeria by the year 1980 (World Bank Group, 2015). The implementation in the 1970s of free and compulsory universal primary education was in line with this goal. UNICEF (United Nations International Children Emergency Fund) and UNESCO (United Nations Educational, Scientific and Cultural

Organisation) and several other organisations have sponsored research and conferences within Nigeria, with some focusing on the promotion of education of girls. Up until the 1970s, considerably more boys than girls participated in education in Nigeria.

Inequity in access to educational opportunity is a common phenomenon in most cultures and communities. In Nigeria for instance, the Igbo-speaking parts of the country favoured the education of male children (Ibereme & Anusiem, nd.), with the education of women – especially those from low-income backgrounds – being discouraged by socio-economic forces. Gender role stereotyping among patriarchal ethnic groups put women at serious educational disadvantage compared to their male counterparts. These socio-cultural, religious, and economic barriers were responsible for the limited access to education by women.

The dynamics of early marriage and childbearing also affect the educational future of girls. It has been noted further that this varies from region to region and is not so rampant in regions where the higher 'bride-price' is paid for educated girls, since parents tend to be more likely to send their daughters to schools. In some communities and regions, women and girls often have no say concerning when and who they marry. Economic hardship often forces families to give their daughters up to child marriage, which not only leaves the girls vulnerable to abuse but limits their educational opportunities. However, strategies to increase the enrolment and retention of girls in school are as important as girls' and women's access to education. Discriminatory practices in higher education that impede women are not always conscious; sometimes they can occur by default (Mott, 2022). Institutions of higher learning are not designed to discriminate against women, but because diverse systems interact to affect one another, people who come from cultures where women and girls are discriminated against are more likely to continue doing so even in the university setting.

3.2 Barriers to and prospects for female entrepreneurship in Nigeria

In some African societies, entrepreneurship is often considered a male-gendered concept and carries masculine connotations. However, the critical role of women in entrepreneurship and their contribution to socio-economic transformations cannot be ignored (Nwachukwu et al., 2021). Women's entrepreneurship is a growing phenomenon today, contributing to economic growth, job creation and better quality of life. The survival of women-owned businesses has become critical in advancing women's economic strength and gender equality. It is important then to look at entrepreneurship from a gender perspective to identify the constraints and challenges women face in entrepreneurship, but also some of the enablers and drivers as well as the coping strategies that women use in entrepreneurship (Global

Entrepreneurship Monitor, 2017; Martinez Dy & Marlow, 2017; McMullen & Warnick, 2016; Nwachukwu et al., 2021). In recognition of the role of women in this domain, the field of women's entrepreneurship has emerged as an important area of research over the years, with governments and researchers in both developed and developing countries giving it a great deal of attention (Altinay et al., 2017; Carranza et al., 2018; Carter & Marlow, 2007; Carter et al., 2007).

Specifically, women entrepreneurs in Nigeria account for a large number of enterprises, thus creating employment and fostering economic growth and social cohesion (Lincoln, 2012). This has contributed significantly to solutions to the rising challenges of poverty and unemployment (Naudé, 2011). Women entrepreneurs have a strong influence on the sustainable development processes in both developed and developing countries due to their role in poverty alleviation, employment creation and innovation. The role of women within the entrepreneurial milieu is therefore of significant importance as they make notable contributions to the economic development of many nations around the world (Minitti, & Naudé, 2010)

The economic activities of most women are based on the informal sector of the economy, both in rural and in urban areas. This is mainly due to entry to the informal sector being easy and open to a diverse range of people. The main roles for women in this sphere include hairdressing, fashion design and various crafts. The informal sector is characterised by reliance on indigenous resources, family ownership of enterprises, labour-intensive and adapted technology, unregulated and competitive markets, and skills which can be acquired outside the formal educational system. Most women are active in the informal sector predominantly because entry does not require any minimum level of education, unlike in the formal sector. In addition, they can combine their activities with domestic responsibilities. As well, the establishment of most businesses in the informal sector requires little capital (Kenny, 2019).

There are many challenges confronting women and their ability to upgrade their business ventures. These include poor access to markets, information, technology and finance (Kenny, 2019). For most women, lack of access to modern technologies, including computers and internet facilities, presents further challenges to entrepreneurship. This is in addition to their role as mothers and wives, which leaves little time for training and acquiring skills. They are expected to undertake the majority of the housework and childcare. Access to finance is also a major challenge, in the same way that the guarantees required for external financing may be beyond the scope of their personal assets. The challenges of penetrating informal financial networks, stereotyping and disconnection are yet to be surmounted. Other challenges listed by Kenny (2019) include role conflicts, such as work-home role conflict, regardless

of the structure of their family or the number of hours spent at work; the high costs of doing business in the country; poor links with support services; unfavourable policy and regulatory environments; globalisation (including rapid technological changes, trade and finance flows and globalisation of production); and perceptions in society, including the idea that men have a better aptitude for management.

In spite of the significant role played by women, their position in many African economies leaves much to be desired. Women play an important role in the development of their families and communities economically. However, in comparison to men, they disproportionately experience barriers to entrepreneurship such as living in low-income households, unemployment, lack of training and discrimination (Amaechi, 2016). The barriers and challenges affect all women-led ventures (Bosse & Taylor, 2012). Nigerian women entrepreneurs operate in an unfavourable business environment, characterised by challenges ranging from infrastructural deficiencies, corruption, low access to and high cost of finance, and weak institutions. Women entrepreneurs are not afforded the same opportunities as their male counterparts, due in part to deep-rooted socio-cultural norms that perceive them as just wives and mothers. It is clear that there is a wide gender gap when it comes to entrepreneurship, as women are believed to have a lower propensity to participate in entrepreneurial activities compared to their male counterparts. This gap is due to cultural beliefs in Nigeria that a woman's function is to raise children instead of pursuing other opportunities (Amaechi, 2016).

Three of the main economic activities women entrepreneurs are engaged in are services (57 per cent), trading (28 per cent) and agriculture (15 per cent) as found by Ademokun and Ajayi (2012). In these areas, they face challenges including inadequate provision of infrastructure, including lack of electricity, inadequate transportation systems and improper solid waste disposal systems. They also grapple with societal perceptions and notions that men have better managerial skills than women (Ukonu & Tafamel, 2011). A factor that has become worrisome in Nigeria is that while a wide range of financial institutions offer business loans, these institutions charge high interest rates to potential entrepreneurs, as high as 28 per cent, thus discouraging aspiring women entrepreneurs (Ihugba et al., 2013). This tactic can be more difficult for Nigerian women entrepreneurs as they either cannot access a loan from the bank due to a low or non-existent credit rating or they are forced by circumstances to use an accessed loan for other family needs (Ekpe, 2014).

4 Study findings

4.1 Gender discrimination in universities

As shown in Figure 4, of those respondents who reported they had been involved in entrepreneurship activities slightly less than half (49.0 per cent) rated their financial situation as fair, 27.3 per cent said it was poor and 12.1 per cent said it was very poor. It was further observed that students who said that they had never involved themselves in entrepreneurship seemed to be doing well financially compared to those who said

that they had involvement in entrepreneurship activities. This may imply that students who had involved themselves in entrepreneurship were struggling financially. Further analysis showed that female students' mean rating of overall financial situation was slightly higher compared to that of their male counterparts. The Man-Whitney U test showed a p value = 0.218 > 0.05, indicating a statistically insignificant relationship between students' rating of their overall financial situation and their gender, with female students having a higher rating than male students

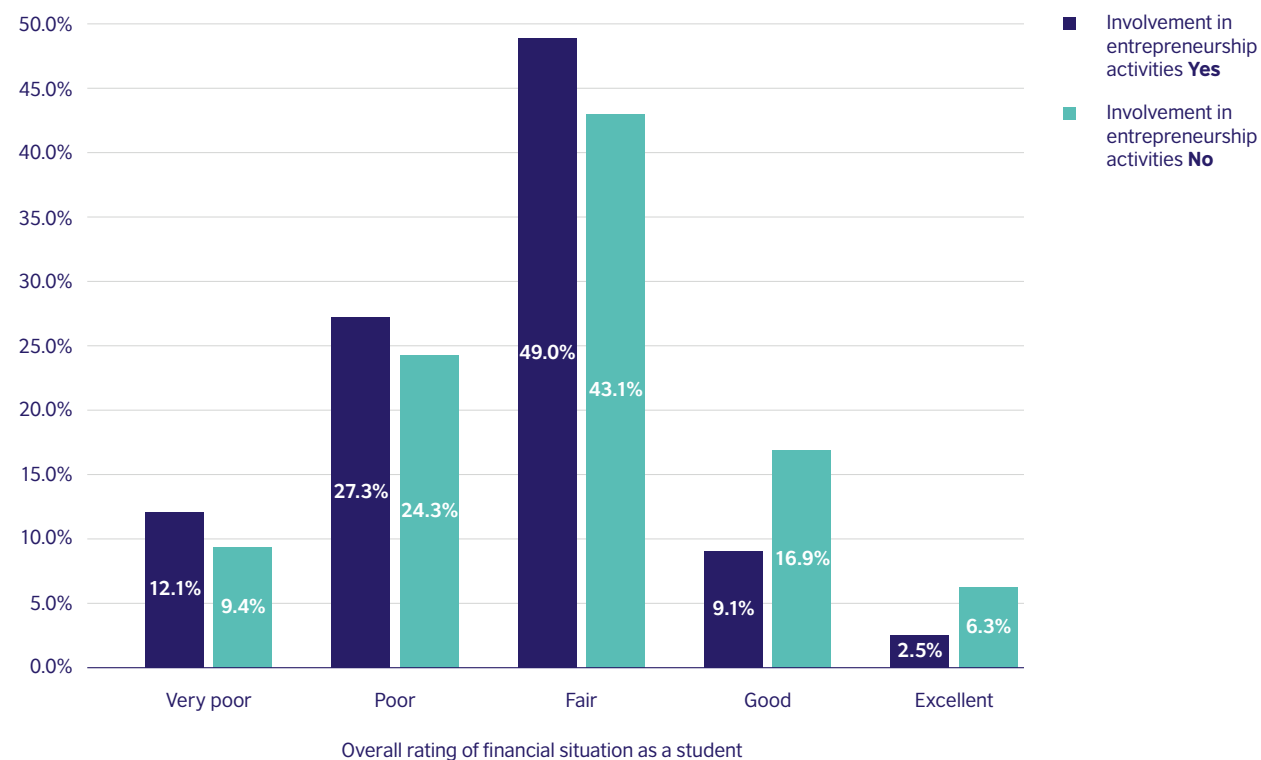


Figure 4. Students' rating of their overall financial situation by their involvement in entrepreneurship activities

Gender inequality has been seen as a significant problem in Nigerian universities. This resulted in gender policies to foster development of female students and female staff in higher learning institutions (Abiose, 2008; Ogbogu, 2010; Okeke, 2022). In our survey of students, the majority of respondents gave neutral responses to statements about gender inequality and thus may not have had a

full grasp of gender policies and frameworks in their institutions or may not have been aware of experiences regarding gender bias within their institutions. However, the majority of the students who were not neutral in their responses agreed that there were no gender inequality concerns and that their institutions were able to tackle gender-related any concerns (Table 3).

Table 3. Students' agreement with gender inequality statements

Item	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean
I have experienced gender bias which hampers equal access to entrepreneurship opportunities.	17.1%	32.5%	28.4%	17.6%	4.4%	2.60
I have experienced gender-based discrimination within my institution that could affect my academic performance.	25.2%	39.6%	20.8%	13.0%	1.5%	2.26
My institution has supportive policies and frameworks for students to access employment opportunities.	8.4%	18.5%	36.0%	32.8%	4.4%	3.06
I have experienced discrimination in access to employment opportunities based on gender.	15.8%	37.7%	29.6%	14.5%	2.5%	2.50
My institution has put in place gender-inclusive policies and practices.	9.1%	14.3%	40.6%	31.5%	4.4%	3.08
My institution has support units to which I can report when I experience discrimination or mistreatment based on my gender.	8.2%	13.1%	32.9%	35.9%	9.9%	3.26
The support units in my institution provide adequate support to mitigate cases of discrimination.	6.9%	13.6%	39.9%	32.9%	6.7%	3.19
Societal expectations especially with regard to my gender played an important role in my career/course choice.	7.7%	21.5%	33.7%	32.2%	5.0%	3.05
I have experienced gender-based violence as a student in my institution	25.0%	32.4%	25.2%	15.3%	2.0%	2.37
My institution provides adequate support systems to enable me to deal with gender challenges in accessing employability opportunities.	7.0%	13.9%	44.0%	28.6%	6.5%	3.14
Some of the policies and practices in my institution perpetuate gender inequality and hinder access to entrepreneurship and employability opportunities.	16.1%	25.8%	34.7%	21.3%	2.0%	2.67
I have experienced gender-related biases in the financial support services to students, including for entrepreneurial ventures.	16.8%	29.1%	32.4%	18.1%	3.5%	2.62
There are gender disparities in my institution in accessing mentorship and networking opportunities for entrepreneurial growth and success.	14.7%	27.7%	34.7%	21.4%	1.5%	2.67
There are improvements in the way my institution deals with gender-based discrimination towards students.	5.5%	11.5%	38.9%	37.2%	7.0%	3.29

Based on the outcomes from the focus group discussions with students and interviews with the institutional leaders, it was notable that despite the institutional design, which was not intended to discriminate among students, societal and cultural norms still affected female students' participation in Nigerian universities, with regional variations.

I can't remember any challenges female students face in my institution. Incidentally, female students turn out to be the best graduating students over the years ... a number of them are married women. (A male dean of faculty)

This was confirmed by another interviewee:

And because those peculiarities do not really exist in this part of the country but do in some other parts ... obviously not in the Southeast, where we happen to belong to.

(A male dean, Student Affairs)

It was notable that in the southern part of Nigeria, gender-based challenges were minimal and female students were more engaged in educational activities, similar to their male counterparts. Conversely, gender-based challenges were more evident in the northern part of the country, though they were decreasing. In the universities in the southern regions of the country, the leaders noted that their current challenge was encouraging greater male student engagement in higher education. One of the respondents from a northern institution confirmed that gender disparity in higher education persists in the north as a result of cultural norms. The respondent asserted:

In the northern hemisphere ... we were not given equal opportunity But coming to the southern hemisphere, especially the southwest, women and men are given equal opportunity in educational opportunities.

(A female dean of faculty)

It is thus notable that part of what was fostering gender inequality in Nigerian universities was entrenched societal and cultural norms, and since universities are integral parts of the Nigerian society, they are unlikely to be insulated from these cultural influences. This concurs with Mott's (2022) assertion that discrimination against female students in the university is not always conscious but happens by default. Consequently, our respondents did highlight challenges faced by female students, including harassment, financial challenges, emotional problems, marital problems, accommodation problems and insecurity. These findings agree with previous literature in Nigeria (Obasi, 2000; Omorogbe & Onojerena, 2020).

Sexual harassment, often by male staff, is a significant concern, with reports of cases of 'sex-for-grades' in Nigerian universities, despite clear institutional policies against this. Additionally, harassment can come from female personnel in positions of authority, driven by envy, often leading to verbal abuse of female students:

... there are still some form of harassment among the female students, or towards the female students. There is also a lot of animosity coming from staff in the administrative offices, in the departments. Especially the female staff, whether clerical or administrative staff.

(Director, Centre for Disabilities and Special Needs Research)

Female students in universities face significant financial challenges, requiring more funding than men due to additional personal needs. These challenges are noted across public and private institutions and is influenced by the socio-economic backgrounds of most of the students. It has been noted that in some African households, the education of male children is prioritised over the education of their female siblings due to cultural norms. One of the factors underlying this is the funding challenge at household level. As one of the university leaders asserted:

... the challenge is mostly finance. I will say finance. But women have more financial problems than men because of the gender.

(Head of department)

In many parts of the country, parents prefer to educate the male children (Ihebereme, & Anusiem, nd.). This leads to female students in universities facing several challenges, particularly when balancing studies with the challenges of financial constraints and societal and family expectations, which at times lead them to early marriage. Married students may also struggle to relate to their unmarried peers, exacerbating these challenges:

... they face emotional challenge It's more pronounced Some of them are married. So [there is the] challenge of childbearing during school days.

(Head of department)

Early marriages have been noted as a significant challenge for girls' education in Nigeria. In most regions of the country, there have been reported cases of insecurity, terrorism and non-state actors harassing innocent citizens. There has also been an increase in robbery attacks, and it appears that female students bear the burden of this insecurity. Female students tend to carry the burden of insecurity, with many criminals getting away with their crimes.

... late last year, October ... they robbed some female students at their hostel. Not a university hostel. Private hostel.

(A female dean of faculty)



Another respondent from the northern part of the country reported that there is evidence of bullying against female students by their male counterparts, which at times leads to a feeling of inferiority on the part of the female students:

... sometimes they feel inferior in terms of when they were bullied by their counterparts.

(A female dean of faculty)

From the discussions with students, the gender-based challenges for female students in universities in Nigeria include subjugation of women and the pervasive perception that there are professional roles that are suitable only for men. These perceptions deny women some of the opportunities in society that they deserve. One respondent asserted:

Most times, African mentality has made women subdue ourselves. The fact that, okay, we are not expected in high places like men. I'm sure many women out there have actually accepted the fact that, okay, I can't do this. I think it has really put women in a very small shell.

(A female undergraduate student)

In the survey, we also investigated the challenges students face in the universities in the context of gender disparities. Table 4 reveals that the challenges include lack of access to financial resources, which disproportionately affects young women and men in accessing higher education opportunities. They also experience: challenges based on gender, ethnicity or class when accessing educational opportunities; scheduling of classes that disproportionately affect young men and women; and, for women, an inability to balance academic demands with personal responsibilities due to women being expected to undertake more domestic responsibilities.

The majority of the students agreed that to succeed in entrepreneurship, they would need additional support after graduation. Also, most agreed they would need support to be able to confidently face the world of work. Most of the students agreed that they were confident about future employment, and that they have several opportunities for employment and entrepreneurship. However, for the statement that training at university did not adequately prepare them for employment and entrepreneurship, almost an equal share of students agreed and disagreed. It could be that while some departments or institutions may be doing well in preparing their students for the world of work, others are not putting in efforts to ensure that their students are trained in a way that is relevant to their later employment.

Table 4. Students’ agreement with statements on challenges faced by students/young women and men in the context of their institution

Item	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean
Gender stereotypes affect the educational experiences of students in my institution.	11.5%	27.1%	35.1%	22.6%	3.8%	2.80
Lack of access to resources disproportionately affects young women and men from my institution in accessing higher education opportunities.	6.3%	17.2%	36.6%	32.1%	7.8%	3.18
Cultural norms affect the educational opportunities of young women and men.	3.3%	11.4%	38.9%	38.4%	8.1%	3.37
There is gender-based discrimination within my institution.	19.7%	28.0%	34.8%	14.9%	2.5%	2.53
Access to educational opportunities is at times based on one’s gender, race, ethnicity, age, disability and social class.	12.1%	17.9%	36.0%	29.0%	5.0%	2.97
The scheduling of classes disproportionately affects students engaging in entrepreneurship opportunities.	5.6%	13.9%	39.9%	31.1%	9.6%	3.25
There is a lack of gender-inclusive policies and practices in Sub-Saharan Africa higher education institutions.	4.3%	12.9%	52.8%	27.5%	2.5%	3.11
I face several challenges in balancing academic demands with personal responsibilities.	4.8%	11.9%	34.1%	38.1%	11.1%	3.39
I would need additional support after graduation to enable me succeed in entrepreneurship.	3.5%	5.3%	26.4%	42.0%	22.9%	3.75
I would need additional support and capacity building in some areas to enable me confidently face the world of work.	4.3%	6.3%	25.8%	42.8%	21.0%	3.70
I am confident about my future employment prospects after graduation.	3.5%	8.5%	32.3%	38.8%	16.9%	3.57
I do not think the training we receive from the university adequately prepares us for employment and entrepreneurship.	10.5%	22.2%	32.7%	24.4%	10.2%	3.02
As students, we have several opportunities for employability and entrepreneurship, which we should courageously take up.	4.7%	9.9%	32.3%	37.5%	15.6%	3.49

The survey explored how universities could build gender equality into their policies, practices and culture. Table 5 shows students’ level of agreement with statements on the ways their institutions could foster gender equality in universities. Of the items listed, students were more likely to agree than disagree that their institutions’ gender policies and strategies were important and ought to be implemented fully. They considered it important to have sufficient support services and programmes for female students and frameworks to respond to gender-based discrimination, in addition to advocacy and awareness raising on these topics.

Table 5. Students’ agreement with statements on building gender equality into their institutions

Item	Don’t know	Not important at all	Somewhat important	Important	Very important	Mean
My institution needs to put in place strong gender policies and frameworks.	9.7%	9.9%	20.3%	35.9%	24.3%	3.55
My institution needs to establish support units for students in regard to gender-based discrimination.	5.7%	7.1%	20.4%	39.7%	27.1%	3.75
Students need adequate preparation for the world of work.	2.7%	2.7%	11.9%	35.1%	47.5%	4.22
Raising awareness on challenges facing female students need to be improved.	6.2%	3.5%	16.1%	41.8%	32.4%	3.91
My institution needs to put in place supportive gender-inclusive policies and more support for female students.	6.2%	5.7%	19.9%	38.7%	29.5%	3.80
My institution needs to bring on board various stakeholders to support students to access entrepreneurship and employability opportunities.	2.9%	3.2%	14.0%	39.2%	40.7%	4.12
My institution needs to develop strong collaborations with the industry/private sector and the world of work.	2.9%	3.4%	12.0%	39.3%	42.4%	4.15
My institution needs to raise awareness among various stakeholders about the challenges facing female students in entrepreneurship and accessing employment opportunities.	6.8%	4.1%	16.3%	40.2%	32.4%	3.87
Funding mechanisms need to be put in place to support students for entrepreneurship.	3.4%	3.6%	13.1%	35.8%	44.0%	4.13
Students need to form clubs to support their entrepreneurship activities.	6.0%	6.3%	14.5%	37.7%	35.5%	3.90



4.2 Gender and entrepreneurship education

A critical question in university education in Nigeria is how to equip students with the competences and skills to enable them be job creators and not job seekers. The most recent academic standard – CCMAS – highlights the need to equip university students with entrepreneurship skills that can enable them to become job creators (NUC, 2023a). This is imperative given the high number of graduates who do not have jobs after graduation. Some of them have been described as not employable because they lack the skills to function well in the workplace and to create jobs for themselves and for other members of society. In this study, we explored the topic of gender and entrepreneurship education by looking at universities’ values in relation to entrepreneurship education, the challenges faced by female students in accessing entrepreneurship opportunities, the challenges students face in getting support to establish businesses/ entrepreneurial ventures, the coping strategies used and the institutional training for entrepreneurship.

It is notable that entrepreneurship education thrives better in environments that are conducive to all students. The institutional environment and support for students is thus important in enabling them to acquire entrepreneurship skills, access support (including financing) and build the social networks that are needed to succeed. The study thus explored students’ satisfaction with institutional learning environments and support services, with the aim of understanding the extent to which the university’s learning environment can promote entrepreneurship education and activities.

The students reported satisfaction with most aspects of the institutional services, such as their relationships with teachers, the provision of learning facilities, and the support services and gender inclusivity on their campuses. They further appreciated the dynamism of the learning environment and the opportunities to participate in activities such as workshops, seminars and internships. However, 40 per cent of the respondents were not satisfied with the entrepreneurial context of their institutions, including the lack of entrepreneurial opportunities, lack of financial support for entrepreneurship, and poor links with industry and the private sector as well as other professional networks. As illustrated in Tables 6 and 7, most of the students were not satisfied with the services, especially housing/ accommodation, access to funding for entrepreneurship, internet access and support to establish businesses. It should be noted that aspects such as internet access are important drivers of entrepreneurship. Some students were, however, neutral on these aspects, though it is possible that this is because they have less interest in entrepreneurship.

Table 6. Students’ satisfaction with aspects of their institution’s learning environment

	Dissatisfied	Somewhat satisfied	Satisfied	Very satisfied	Mean
The overall learning environment	10.2%	26.2%	56.1%	7.5%	2.61
The guidance and support from the department	13.0%	19.5%	54.6%	13.0%	2.68
Relevance of the courses offered	4.7%	10.2%	65.3%	19.8%	3.00
Relevance of the programme to the labour market	7.5%	17.8%	57.3%	17.4%	2.84
Availability of learning facilities, such as lecture rooms, computers and library	17.4%	21.8%	51.0%	9.8%	2.53
Professional relationship with lecturers	6.6%	15.5%	63.9%	14.1%	2.85
Professional relationships with students and support staff	5.4%	13.9%	66.7%	13.9%	2.89
Adequacy of opportunities for entrepreneurship	15.5%	25.7%	51.3%	7.5%	2.51
Adequacy of financial support for studies	18.9%	26.4%	46.1%	8.6%	2.45
Support (including financial) for establishing small entrepreneurship activities	25.4%	28.2%	41.0%	5.4%	2.26
Opportunities to share relevant experiences with students from other universities	22.4%	20.0%	49.3%	8.3%	2.44
Support to participate in relevant seminars, workshops	17.4%	19.9%	56.4%	6.4%	2.52
Networking opportunities with industry/ private sector	23.1%	25.2%	45.7%	6.0%	2.35
Opportunities to participate in work-study placements and internships	16.4%	20.1%	54.7%	8.8%	2.56
Gender inclusivity in the campus environment	4.3%	11.1%	71.6%	13.0%	2.93
Access to stable internet	29.5%	23.7%	37.6%	9.2%	2.26
Intellectual environment of the department	8.3%	17.5%	63.4%	10.8%	2.77
Access to funding opportunities and sources	28.0%	23.5%	42.5%	5.9%	2.26
Access to information on possible employment opportunities	24.7%	21.5%	47.5%	6.3%	2.35
Training on how to navigate the world of work	19.7%	22.8%	49.8%	7.7%	2.45
Quality of accommodation on campus	25.8%	23.6%	45.2%	5.4%	2.30

Table 7. Students’ satisfaction with support services within their institution

	Very dissatisfied	Dissatisfied	Neutral	Satisfied	Very satisfied	Mean
Dean’s office	5.7%	9.9%	34.3%	40.5%	9.6%	3.39
Finance office	7.7%	11.4%	42.8%	33.4%	4.7%	3.16
University registrar’s office	4.7%	7.6%	41.4%	38.2%	8.1%	3.37
IT and system support	8.9%	13.9%	33.7%	35.6%	7.9%	3.20
Student advisory service	7.2%	13.1%	39.9%	30.7%	9.2%	3.22
Counselling service	6.7%	11.9%	42.3%	30.1%	9.0%	3.23
Library support service	4.5%	8.2%	30.8%	43.9%	12.7%	3.52
Chaplaincy or multi-faith provision	4.5%	6.2%	40.8%	36.6%	11.9%	3.45
Student housing/ accommodation	15.7%	18.7%	29.2%	28.9%	7.5%	2.94
Students’ union	9.2%	17.1%	38.9%	28.7%	6.2%	3.06
Health centre	10.9%	16.4%	31.8%	33.3%	7.7%	3.10
Campus eating places	12.3%	17.0%	32.8%	31.4%	6.4%	3.02
University clubs/societies/ fellowships	6.9%	8.4%	40.0%	34.7%	9.9%	3.32
Support for female students and people with disability	7.7%	11.7%	41.4%	30.5%	8.7%	3.21
Career guidance office	7.5%	14.5%	43.1%	28.9%	6.0%	3.11
Entrepreneurship support unit	7.0%	11.7%	44.0%	30.3%	7.0%	3.19

Arising from the interviews with institutional leaders, it is encouraging to note that nearly all the universities involved in this study reported commitment to entrepreneurship education and to supporting their students to gain entrepreneurial skills. They had put in place programmes and policies aiming to develop entrepreneurial mindset and skills among students. Some had made entrepreneurship a compulsory course for all students to instil the relevant competencies. Some had also established entrepreneurship centres or departments, and incubation hubs, with some adopting innovative models to promote business development, mindset shifts, practical collaboration and mentoring. One example was holding annual innovationf awards to encourage students to see themselves as innovators in their fields. One leader said:

... we don’t believe in many of the models that we hear about in the Nigerian university system. So let me explain. [...] We believe in keeping people in a number of dimensions. Number one, it keeps you with a mental model or mindset that you yourself are made to be an innovator. Number two, we give you training and education that can start you off. Our students learn things like business development.

(A vice-chancellor)

However, university administrators reported that there is no specific policy on entrepreneurship education, particularly for female students. At the same time, it was noted that an interesting aspect of participation in entrepreneurship education is that women make up the majority of the participants.

4.3 Challenges in accessing entrepreneurship opportunities

The previous sections have highlighted the challenges and barriers that women encounter when seeking to access entrepreneurship opportunities (Richardson, 2017). We also noted that female students in Nigerian universities encounter similar challenges. As Table 8 shows, most students in Nigeria universities face challenges in their efforts to engage in entrepreneurship activities. The survey demonstrates that this included gender-based inequalities at institutional level when accessing entrepreneurship opportunities. As noted in interviews, most female students thought that while the situation was somewhat similar for their male counterparts, it was more pronounced for women due to factors such as gender prejudice, social norms that are biased against women and some outdated cultural practices. The female students noted that they needed to develop strategies to navigate their situation. This included resilience, grit, endurance and sheer hard work to enable them to compete. Male students seemed more resilient, innovative and willing to explore various entrepreneurship opportunities. It was noted that most business ventures around the universities were run by students, especially the male ones. In contrast, female students seemed to view entrepreneurship as a means of economic empowerment. They also anticipated various risks with entrepreneurship, including failure. A male student from a Business School noted:



Another male student was of the view that female students do not usually engage in business while on campus, as they find it difficult to navigate the social space but need more financial support because cultural/social expectations work against them. He said:

... our female colleagues lack in participation of businesses. Most of the businesses in our school that are going on, [it is] mostly the men that participate in it. They [female students] don’t have the funds, they don’t have the capacity on how to like show up to the public, open up. They feel too shy, some of them.

We are more resilient and aggressive when it comes to taking responsibility.’ He explained: ‘Women don’t have that time. They think of entrepreneurship as a means of economic empowerment.’

Despite the hurdles that female students may experience, leading actors in Nigeria’s higher education institutions noted that there was not much support aimed at participation of female students in entrepreneurship. And we found no training programme targeting women only. The programmes were open to all genders, and female students seemed to outperform male students in terms of participation in entrepreneurship. Student respondents however noted that their institutions had sensitisation and advocacy programmes to encourage female students to pursue entrepreneurial opportunities. The efforts towards sensitisation appear to highlight the need to improve entrepreneurial abilities among female students. The benefits could in many ways increase the self-esteem of female students.

Table 8: Students’ agreement with statements on gender-based inequalities in access to entrepreneurship opportunities

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean
There are gender stereotypes and considerations that influence hiring practices of university students in my institution.	12.5%	24.5%	40.5%	20.5%	2.0%	2.75
Societal gender norms influence my success and the types of entrepreneurial opportunities that I can access in my institution.	11.1%	19.8%	42.0%	23.9%	3.3%	2.88
I have experienced gender-based biases in access to professional development resources, business networks and entrepreneurship opportunities in my institution.	15.0%	32.8%	34.0%	15.5%	2.8%	2.58
Challenges/barriers in accessing funding disproportionately affects female entrepreneurs in my institution.	12.0%	29.2%	37.9%	18.5%	2.5%	2.70
Some of the societal norms discourage female students from risk-taking behaviour for entrepreneurship.	9.3%	21.4%	38.2%	26.6%	4.5%	2.96
Cultural biases influence the types of industries pursued by male and female entrepreneurs in SSA.	7.3%	15.8%	47.1%	25.8%	4.0%	3.04
Due to my gender, I have faced gender-related obstacles while seeking funding or investment for entrepreneurship ventures.	11.3%	24.6%	41.1%	20.8%	2.3%	2.78
I have experienced disparities in the support and mentorship for male and female entrepreneurs in my institution.	11.0%	27.0%	43.0%	15.5%	3.5%	2.74



4.4 Challenges in accessing support to establish businesses

The study also explored the challenges that female students grapple with when attempting to get support to establish business/entrepreneurship ventures. This arose because, even after some exposure to entrepreneurship education, most graduates find it difficult to secure the support they need to start their own businesses. The focus group discussions revealed that the main challenges the female students faced were lack of funding opportunities for start-ups, entrenched cultural/societal norms that do not support female entrepreneurs, limited access to mentoring opportunities, poor businesses environments and the fast-paced changes in society. As one of the students firmed up, the challenge of accessing start-up funds is significant.

... and then trying to get funding or even get family members or save up enough to be able to get this software is a big challenge.

(A PhD student)

It was noted that cultural norms also impede female students, especially in cases where society does not expect them to engage in business ventures. Due to the prevalence of such norms, female students encountered a range of challenges in accessing funding or support for establishing business ventures, more so than their male colleagues. One of the students said:

... and someone will tell you, oh, this is not an area for women. So, in that case, they find it difficult to put [in] their funding because you as a woman, they believe you’re going to have other distractions that will probably not allow you to realise your capital.

(A PhD student)

Lack of mentors who can help direct students on how to invest was another barrier encountered by the female students when attempting to establish their own business. They noted that mentors could help in building networks that can foster their businesses. Personality traits that inhibit social interactions are also considered challenges for students when it comes to operating their own businesses. One said:

So, we also have limited access to mentorship and networks ... for you to start up a business, you need to build your networks That’s the reason why we are in school too ... there are some students that they are very shy to associate with the next person.

(A male undergraduate student)

4.5 Institutional training for entrepreneurship

The training offered to students in higher learning institutions could play a crucial role in introducing them to others and developing their skills in entrepreneurship. In recent years several universities in Nigeria have introduced courses in entrepreneurship (NUC, 2007, 2023a). There is a need to understand the types of skills and abilities Nigerian universities pass on to students. As noted in Table 9, most of the students reported that the training, they received from their institution helped them to gain entrepreneurship skills. Core skills and competences in their professions, such as developing and applying theories, techniques, methods and tools to solve problems in their fields, integrating the existing knowledge across disciplinary boundaries and evaluating the limits of their knowledge and skills, critical thinking, knowledge of professional ethics, academic writing and communication skills were rated as having been moderately acquired.

It was noted, however, that the training does not have a significant effect on more innovative skills and abilities, such as understanding current and emerging issues and challenges in their fields, skills for labour market navigation, leadership skills, collaborative skills and skills for making contact and successfully engaging with employers.

The focus group discussions revealed a similar range of skills and competences acquired. Students reported that their training included relating learning to real-life experiences and problems, and presentations of real-life problems that could help them understand how problems are solved. There were also compulsory courses on entrepreneurship in Nigerian universities.

I think the way we are being prepared for this entrepreneurship is by making us be cautious of it. [...] When a lecturer teaches, they asks you to apply it in real life.

(An undergraduate student from a private university)



Similarly, students thought that their training effectively prepared them for their desired careers and aligned with their life aspirations. They highlighted factors such as self-determination and an entrepreneurial mindset as driving the establishment of businesses while still in university. These intrinsic motivations helped them sustain their interest and perseverance, even when faced with challenges:

I would say determination, determination. Yeah, as a woman, more often than not, your motivation comes from within, not from outside.

(A PhD student)

Students reported that inadequate time, unstable lecture schedule, and infrastructural problems constituted major problems.

Maybe there are some lecturers that might fix a class. Maybe their class is around, maybe let's say two to four. They may decide to shift the class, maybe four to six.

(A male student)

On this, one of the female students noted: *'And another thing that was so challenging to me was time.'*

In spite of the challenges, very few discussions centred on the strategies students adopted to overcome these. It appears that some of the challenges persisted as the students continued with their business. However, they reported that the factors that had motivated them to start the businesses were intrinsic, implying that they were likely to continue with their business irrespective of any challenges that may come about. As one example, a student reported that he had to use alternative gadgets/facilities that could be easily charged with a generator set since there was no constant power supply within the university environment.

It was notable that some of the students planned to continue with the businesses they started in university, whereas some did not. Students who had businesses because it was more convenient for them to combine their studies were more likely to drop the business after graduating than those who were involved in businesses related to what they were studying and with a clear link to the kind profession they were interested in.

During the conversation, little was stated regarding how being from a disadvantaged background affects students' participation in entrepreneurial activities. In an exception to this, one female postgraduate student described getting involved in a business after experiencing financial difficulties in her final year. Her motivation sprang from seeing that her mother, who ran a business, had been able to meet her financial demands, while her father, a public officer, had struggled to do so.

Table 9. Students' responses on whether training in the institution helped them develop skills and abilities

Item	Not at all	To a very little extent	To some extent	To a moderate extent	To a large extent	Mean
Understanding the current and emerging issues and challenges in your field	2.1%	12.4%	40.4%	34.2%	10.9%	2.39
Developing and applying theories, techniques, methods and tools to solve problems in your field	2.4%	10.6%	38.8%	32.9%	15.4%	2.48
Integrating the existing knowledge across disciplinary boundaries and evaluating the limits of your knowledge and skill	2.4%	8.6%	38.8%	35.6%	14.6%	2.51
Selecting and using appropriate technology to facilitate and manage knowledge communication	4.5%	11.5%	33.4%	37.0%	13.6%	2.44
Thinking critically, analytically and creatively in your field	0.7%	8.9%	32.4%	35.5%	22.5%	2.70
Understanding the professional ethics and standards in your field	2.4%	6.4%	29.4%	39.4%	22.4%	2.73
Understanding the requirements of the labour market	4.6%	11.5%	35.5%	33.1%	15.3%	2.43
Developing business plans and grant proposals	10.6%	16.3%	30.2%	30.7%	12.2%	2.18
Identifying entrepreneurship opportunities	6.3%	13.5%	35.3%	30.8%	14.2%	2.33
Understanding how to fit in the competitive labour market	6.8%	14.3%	36.1%	32.4%	10.4%	2.25
Analysing, interpreting, synthesising data and making informed conclusions and judgments	4.6%	14.2%	36.5%	34.4%	10.3%	2.32
Preparing academic writing for presentations or professional publications	3.4%	12.1%	33.7%	37.1%	13.6%	2.45
Communicating clearly and delivering professional presentations	3.9%	10.5%	34.8%	33.8%	17.0%	2.50
Working collaboratively with an interdisciplinary or multidisciplinary teams	6.6%	14.3%	34.6%	30.5%	14.0%	2.31
Evaluating and maximising entrepreneurship and employment opportunities	6.4%	12.0%	37.2%	31.8%	12.7%	2.33
Having successful engagements with prospective employers	11.8%	12.7%	38.2%	26.0%	11.3%	2.12
Improving leadership skills and ability to maneuver challenging situations	5.6%	10.3%	36.4%	31.1%	16.6%	2.43

4.6 Employability opportunities

In the Nigerian context, both men and women appear to have challenges in securing employability opportunities. The job market has thus become very competitive, making it difficult for recently graduated students entering the job market to get employment. This is more complex for female students, who noted the several societal challenges they face. The respondents recognised a number of barriers to young graduates, especially women, in securing employment. Some of them pointed out cases of sexual harassment, intimidation and bribery in their quest for jobs.

The few jobs you see, there are so many competing for them. From reports ... whether in social media or not, sexual harassment by would-be ... from employers or bosses ... and the intimidation too.

(Director, Centre for Disabilities and Special Needs Research)

It was also noted that a problem faced by female students seeking employment was that some employers still viewed taking on young women as a risk due to the time they may take off for antenatal leave, which they perceive as loss of time and resources for the organisation. This is elaborated on in the following remark by one of the university leaders:

The challenge is marriage also comes up. Some employers will always want single, single female students, especially some banks, they will place a tag on a job, maybe marital status. Others prefer married women and not those who are still single, and these can suppress the opportunities for women in certain cases.

(Head of department)

Another challenge is that of deep-seated cultural and social norms that define and create expectations on women and in most cases prevent them from accessing employment opportunities. In some of the cultures in Nigeria, certain jobs and tasks are reserved for men. Thus, women rarely take up such roles and in most cases do not compete for them based on the perception that they are the preserve of men. These barriers limit women's employment opportunities:

... sometimes people feel there are things you can ask a woman to do [and things] you may not be able to ask a woman to do. One, on ethical grounds. Two, on cultural grounds. Three, on gender grounds. [...] People also discriminate against women, and sometimes increasingly fear of the gender dynamics.

(A vice-chancellor)

Responses from institutional administrators and executives revealed that they may not do much to change societal cultures and beliefs. They noted, however, that certain perspectives and cultures were changing due to various reasons, including government policies, advocacy and awareness strategies. University leaders conceded that in the past, they did not have strong engagement with industry, but noted this had changed in recent years. Nigerian universities have started collaborations with industry and employers via SIWES programmes and internships opportunities. There are also instances where industries have engaged with the universities in research and product development and in community-based interventions. These collaborations still need to be supported and scaled up for more benefits to be attained, especially for students. They would also enable students to gain better insights into the world of work. In some of the universities included in this study, private sector partners had supported the establishment of incubation centres which have become very useful to the students.

While respondents across universities reported that they make efforts to support students for employability, their programmes were not specifically designed for female students but for the general student population. It was, however, notable that one of the universities in the Southwest had an employability enhancement scheme that emphasised support for female students and also gave them counselling support to build their resilience. It also supported them in developing a compelling resume and ensured that their internship comprised solid work experience that could be incorporated into the resume in preparation for job seeking and the world of work. Nonetheless, these efforts are not extensive

and need to be further developed and more focused on female students to enable them to chart their way into the competitive employment field.

It was, however, found from the survey that the students did not agree strongly that their gender strongly influenced their chances of employment success (Table 10). The majority of the responses were neutral, maybe because the students had not yet entered the job market. However, 20 per cent had encountered gender-specific barriers and 40 per cent had experienced societal norms and expectations that discourage women from pursuing entrepreneurship.

Students who were not neutral in their responses tended to agree that gender affects students' perceptions of their skills and qualifications by potential employers, that there are societal expectations that affect female students in accessing mentorship opportunities, and that there are some societal norms and expectations that discourage female students from pursuing certain fields of study. Furthermore, students also noted that their institutions provided equal platforms for both sexes in accessing opportunities that can improve their employability.

Table 10. Students' responses on gender impacts from accessing opportunities to improve employability

Item	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean
I have encountered gender-specific barriers when seeking internships or job opportunities.	10.8%	29.3%	38.1%	19.8%	2.0%	2.73
Gender affects students' perceptions of their skills and qualifications by potential employers.	8.8%	19.9%	38.1%	30.1%	3.0%	2.98
There are societal expectations that affect female students when accessing mentorship opportunities in higher education in Sub-Saharan Africa.	7.8%	14.9%	42.4%	30.6%	4.3%	3.09
There are some societal norms and expectations that discourage female students from pursuing certain fields of study.	7.6%	12.2%	34.6%	39.7%	5.9%	3.24
My institution provides female students with adequate support for entrepreneurship and employability initiatives.	7.1%	12.4%	46.3%	30.4%	3.8%	3.11
My institution offers gender-inclusive entrepreneurship and employability programmes.	6.6%	11.5%	41.3%	36.5%	4.1%	3.20
My institution considers the diverse needs and experiences of students when providing support services for entrepreneurship and employability support services.	6.6%	10.4%	46.2%	31.7%	5.1%	3.18
I have experienced gender biases in funding and support for initiatives aimed at improving outcomes for female students and graduates in my institution	12.1%	27.9%	41.0%	16.8%	2.3%	2.69
In my institution, there is equal access to career development resources and workshops regardless of gender.	3.5%	7.0%	33.7%	44.5%	11.3%	3.53
There are gender biases in the recruitment and selection processes for internships or jobs at my institution.	12.1%	25.5%	39.9%	17.7%	4.8%	2.78

The students seem on the whole to be satisfied with the support their institutions offer in relation to pursuing and accessing employment opportunities.

4.7 Policies and frameworks to tackle challenges facing female students

While mechanisms exist to deal with the challenges faced by students, there is little specific policy on gender discrimination. Most respondents indicated that universities lack dedicated policies on discrimination against female students:

I don't think there's ... any formally written down policy for any such discrimination. I'm not aware.

(Head of department)

Only one respondent reported that seminars on gender-based challenges raised awareness that all genders should understand that they have equal opportunities.

... our societal norms normally believe that women should be subservient to men. During the course of all those seminars that we organise for gender, we make them to know that nobody should be a servant to another gender.

(A head of department)



More so, gender bias had a negative effect on accessing opportunities to improve student employability, as shown in Table 11. The majority of the responses were neutral, indicating that the students neither agreed nor disagreed with the statements. This might be due to students not being too sure about how gender impacts access to opportunities to boost employability. However, students who were not neutral in their responses tended to agree that gender of the student affects potential employers' perceptions of their skills and qualifications by potential employers, that there are societal expectations that affect female students when accessing mentorship opportunities, and that there are some societal norms and expectations that discourage female students from pursuing certain fields of study. Furthermore, students also noted that their institutions provided equal platforms for both sexes to access opportunities to improve their employability.

Table 11. Students' responses on gender impacts in accessing opportunities that boost student employability

Item	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean
I have encountered gender-specific barriers when seeking internships or job opportunities.	10.8%	29.3%	38.1%	19.8%	2.0%	2.73
Gender of the student affects potential employers' perceptions of their skills and qualifications.	8.8%	19.9%	38.1%	30.1%	3.0%	2.98
There are societal expectations that affect female students when accessing mentorship opportunities in higher education in Sub-Saharan Africa.	7.8%	14.9%	42.4%	30.6%	4.3%	3.09
There are some societal norms and expectations that discourage female students from pursuing certain fields of study.	7.6%	12.2%	34.6%	39.7%	5.9%	3.24
My institution provides female students with adequate support for entrepreneurship and employability initiatives.	7.1%	12.4%	46.3%	30.4%	3.8%	3.11
My institution offers gender-inclusive entrepreneurship and employability programmes.	6.6%	11.5%	41.3%	36.5%	4.1%	3.20
My institution considers the diverse needs and experiences of students when providing support services for entrepreneurship and employability support services.	6.6%	10.4%	46.2%	31.7%	5.1%	3.18
I have experienced gender biases in funding and support for initiatives aimed at improving outcomes for female students and graduates in my institution,	12.1%	27.9%	41.0%	16.8%	2.3%	2.69
In my institution, there is equal access to career development resources and workshops regardless of gender	3.5%	7.0%	33.7%	44.5%	11.3%	3.53
There are gender biases in the recruitment and selection processes for internships or jobs at my institution	12.1%	25.5%	39.9%	17.7%	4.8%	2.78

5 Conclusions and recommendations

5.1 Summary of study findings

Gender discrimination in Nigerian universities

The study revealed a mixed perception among students, executives and administrators in universities. Most non-neutral respondents believed that female students face significant challenges, including harassment, financial and emotional stress, marital problems and insecurity. In universities in the south, gender-based challenges were reported to be minimal, while in northern universities, gender-based challenges, particularly cultural norms, were more prevalent, though this has tapered off in recent years. Some of the challenges hindering women's participation in higher education include the beliefs that female students are less suited for core science courses, the early marriage among female students and the culturally assigned roles, including care-based roles at home. While universities have general gender-based policies and support systems in place, the desired outcomes seem to be suboptimal in the sense that there still exists gender imbalance in higher education. However, there were some institutional support mechanisms for female students and students who are disadvantaged, which include financial aid, scholarships, special accommodation and strict measures against sexual harassment.

5.1.1 Gender and entrepreneurship education

Previous research shows that entrepreneurship opportunities have been dominated by men, though women are increasingly taking up entrepreneurship opportunities, which foster their contributions to the development of society. Consistent with the literature, our findings highlight Nigerian universities' commitment to entrepreneurship education. It was reported that most of the universities have introduced trainings and courses in entrepreneurship, with some making this compulsory for all students. Some institutions are tailoring their courses to be more practical and to enable the students to develop entrepreneurial skills. Most of the students were satisfied with the training that they received from the universities but were uncertain about their prospects in the labour market. Most of the institutions did not have specific policies targeting female students. Some of the challenges that female students faced in accessing entrepreneurship opportunities included perceived lack of resilience, lack of funding and difficulties in navigation of social networks. Their institutions on the other hand, made efforts to support them mainly by developing sensitisation programmes and trainings to encourage women's participation in entrepreneurship. Both male and female students faced obstacles including funding, mentorship and adapting to changing technology, with self-determination and an entrepreneurial mindset crucial for success.

5.1.2 Employability opportunities

Both male and female students in Nigerian universities face challenges in securing employment. It was noted that female graduate unemployment in Nigeria has grown in recent years. Some of the challenges faced by young female graduates as they sought employability included sexual harassment, intimidation, bribery, and discrimination based on marital status. Employability support was reported not to be gender-specific. University administrators acknowledged limited efforts to collaborate with the private sector and employers to tackle the challenges that female students face. However, some institutions collaborate with employers via SIWES programmes, internships and teaching practices. Responses from students highlighted the importance of practice-based learning, practical training, mentorship and professional engagement for employability. Some of the students were unsure about the effect of gender on employability, but those who did express a view believed gender affects employer perceptions and the capacity to access funding. Societal norms were reported to hinder female students in certain fields of study and employment. Most students reported that they would need support for entrepreneurship and employment opportunities after graduation.

Arising from these, the main findings of the study can be summarised as:

5.1.3 Main findings

- Regarding the institutional learning environment, factors that have to do with relationships with teachers, provision of facilities related to classroom/laboratories and the provision of support services in school by counsellors and support staff were reported to be satisfactory, whereas more than 40 per cent of the students gave low ratings for the learning environment related to entrepreneurial concerns.
- More than 70 per cent of the students thought that the training helped them to learn generic skills to some extent, though it was less effective for more innovative skills and abilities, such as understanding current and emerging issues and challenges in their fields, skills for labour market navigation, leadership skills, collaborative skills and skills for assessing and successfully engaging with employers.
- More than 40 per cent of students provided neutral responses regarding the existence of gender-inclusive policies in their institutions, indicating that many may not have a full grasp of the gender policies and frameworks, whereas more than 23 per cent disagreed that there are gender-inclusive policies in their institutions.
- Among the gender-based challenges that arise for female students in universities in Nigeria are subjugation of women and the pervasive perception that there are professional areas that are suitable only for men and some that are suitable only for women.
- Some of the challenges students face include: lack of access to resources, and this affects young women and men disproportionately in terms of accessing higher education opportunities; access to educational opportunities being affected by gender, ethnicity or class; scheduling of classes that disproportionately affects young men and women; and inability to balance academic demands with personal responsibilities, again with women more affected.
- Administrators and executives of the universities in Nigeria reported that the challenges female students face varied across universities. In universities in southern parts of Nigeria, stakeholders reported minimal gender-based challenges in university, whereas numerous references were made to gender-based challenges for female students in the north even though gender-based cultural norms have been changing.
- Forms of support for female students included financial aid, payment by instalments, special accommodation arrangements for married female students and constant water supply to overcome water problems in the vicinity of the institution, especially to women's hotels off the university campus.
- Some reported cultural/gender norms and constructions that have hindered female participation in higher institutions, including the idea that female students are weaker and do not have the capacity to go into core science courses as well as norms of sexual harassment, insecurity, early marriage among female students and cultural role assignments.
- As many as 40 per cent of the students were unsure about the extent of gender prejudice in entrepreneurial opportunities. A detailed examination of the data indicates that one element that may significantly influence gender bias in access to entrepreneurial opportunities is social norms/culture.
- Both students and school administrators agreed that there are societal expectations that affect female students in accessing mentorship opportunities in higher education in Sub-Saharan Africa, and that societal norms and expectations discourage female students from pursuing certain fields of study.

- Most of the students reported that they will need additional support after graduation to succeed in entrepreneurship, and in some areas to enable them to confidently enter the world of work.
- The majority of students agreed that they were confident about future employment and that they have several opportunities for employment and entrepreneurship. However, almost an equal number of students agreed and disagreed when asked whether the training they receive from the university adequately prepares them for employment and entrepreneurship.
- Themes that emerged from the discussion, especially among the male students, reflected perceived non-resilience of female students in entrepreneurship endeavours, non-participation due to lack of funds and inability to navigate the social space.
- The main challenges students faced in linking with industry and the private sector were inability to adapt to changing business landscapes and not being able to access mentorship.
- Institutional stakeholders reported that they were committed to entrepreneurship education, and had programmes and policies geared towards strengthening entrepreneurship mindset and skill set among students.
- They reported some unique problems female students face in the process of securing employment, including sexual harassment/intimidation and bribery; organisations refusing to hire women because of their marital status; and the perceptions about cultural and biological characteristics of female students.
- Responses from administrators and executives revealed that there may be no intentional efforts made to collaborate with employers as a response to the challenges female students face in getting jobs. However, some institutions noted that they collaborate with employers via SIWES programmes, internships and teaching practice exercise.
- Respondents across the universities reported that they make efforts to support students in terms of employability, though not with programmes designed specifically for female students. One of the universities in the southwest has an employability enhancement scheme which is embedded in their Counselling and Human Development units.
- There are mechanisms to respond to the challenges faced by students in universities, but there appears to be little or no specific policy or mechanism for tackling gender discrimination. Most respondents declared that they had no policy for female students.

5.2 Best practice and innovation

This study has noted the innovative practices that some institutions are attempting to put in place to ameliorate the situation. Despite these attempts, they still fall short of meeting the required needs. The following are some examples of best practice and innovation that the national government and some institutions have put in place to tackle the challenges facing female students in Nigerian universities:

- Most universities have established gender units and social justice departments capable of creating an environment that fosters gender equity in universities.
- Some institutions have entrepreneurship centres and departments that offer courses on entrepreneurship offering opportunities to students to choose careers in this area.
- Some universities in Nigeria emphasise innovative entrepreneurship models, promoting business development, mindset shifts, practical collaboration and annual innovation awards to encourage students to see themselves as innovators in their fields. These models go beyond training on vocational skills.
- There is provision of business mentorship in a few universities to concretise entrepreneurship knowledge and harness students' business ideas.
- Universities ensure that entrepreneurship opportunities are open to all genders supporting gender equity.
- Universities use sensitisation and advocacy programmes to encourage female students to pursue entrepreneurial opportunities.
- Some universities collaborate with employers via SIWES programmes, internships and teaching practice exercises, and this has helped students acquire practical skills that are valuable when seeking employment opportunities.
- An employability enhancement scheme was embedded in the Counselling and Human Development unit in one of the universities, so that students could be guided effectively in their choices.
- The Federal Character Policy of the government that mandates universities to admit students from all geopolitical zones in the country has been adopted in the universities. This has resulted in admission of students from diverse backgrounds.
- The Federal Government Gender Policy materialised into the establishment of gender units in almost all the universities. This has resulted in more awareness on gender equity.

5.3 Recommendations

- Strengthen policy frameworks:** The study recommends strengthening the policy frameworks both at institutional and at national level and to prioritising implementation and awareness raising on these policies. It was noted that some gender policies exist, but were not implemented or enforced, and most of the main stakeholders who could benefit from them were not aware of them. Nigerian universities need to put in place and implement support policies to deal with the challenges faced by female students, especially in employability and entrepreneurship.
- Strengthen institutional support systems for students:** Universities should provide intervention programmes targeted at building female students' emotional resilience and assertiveness so that they will be able to handle emotional challenges they face when up against cultural practices that hinder their participation in university education, entrepreneurship and employment opportunities.
- Secure funding for entrepreneurship opportunities:** The study recognises the challenge of financing, which holds many students back, especially in relation to women getting into entrepreneurship. This requires concerted efforts of various partners and stakeholders to create opportunities for young people, including students, to access funding for start-ups. Governments, industry, private sector and development partners could play an important role in this. There are students with feasible business ideas who are not able to implement them due to lack of financing.
- Promote entrepreneurship education:** Universities should ensure that all students, including female students, are exposed to entrepreneurship education and training and can access financial support to bring good business ideas to fruition. Entrepreneurship programmes in the universities should go beyond the emphasis on vocational skills by actively supporting and promoting entrepreneurship.
- Take advantage of digitalisation and new technologies:** Universities should increase investments in and use of digital technologies and also build the capacities of students to exploit these technologies to tackle the challenges the encounter in entrepreneurship, employability and other areas. This is bound to open many possibilities for employment and entrepreneurship. It was noted that technology has become the main driver of most spheres of life, including the world of work and entrepreneurship. It could connect students to opportunities available even beyond national borders, and it also has the potential to reduce costs on several fronts.

- Develop mentorship programmes for entrepreneurship:** The private sector and international development organisations such as the British Council should help universities establish mentorship programmes in which students could be scaffolded to incubate entrepreneurship ideas and eventually execute such ideas. Experts from industry should volunteer to help students with ideas that foster establishment of new businesses after graduation, and international partners should provide expertise and funds for such programmes.
- Support policy advocacy and implementation:** Nigeria has a gender-inclusive policy, but this has not been fully implemented. To guarantee that the policy is implemented, the Nigerian government and universities should collaborate with international development partners such as the British Council. They can offer both financial support and expertise. This would ensure regular training and awareness campaigns on gender-related challenges for both students and lecturers.

5.4 Conclusions

This study has explored a topical and urgent concern not only in the Nigerian higher education system, but in the higher education sector of most of the Sub-Saharan Africa countries. It is notable that female students still face a myriad of challenges in the universities and these need redress. There is also evidence of efforts being made by various stakeholders, ranging from governments, the higher education institutions themselves, development partners and other stakeholders, to tackle these challenges. Within the British Council's theory of change and targeted efforts to ensure gender equality in higher education, there is growing recognition of the need for awareness and agency, fair access to resources and opportunities, a supportive legal and policy environment, changes in attitudes, beliefs, practices and in discriminatory social norms, and discussion, collaboration and collective action (Mott, 2022). Despite these efforts, the challenges persist and even negate some of the developments that have been made in this endeavour.

The study has explored some of the strategies that could be deployed to deal with challenges faced by female students in Nigerian higher education institutions, especially in regard to access to entrepreneurship and employability opportunities. There is recognition of the need to improve women's participation in higher education and to put in place responsive policies and support systems within institutions. This is in addition to opening up more opportunities for them to access employment opportunities and support for entrepreneurship. There is a need for mindset change among various stakeholders, including the female students themselves, related to some of the entrenched cultural and social norms that continue to hinder female students and women in general from realising their potential. The need for exposure to practical training with a strong focus on entrepreneurship and preparation for the future demands of the world of work is also discernible. This is in addition to the need to stall all forms of discrimination and exclusion of girls and the need to integrate confidence-building mechanisms into educational systems. As one of the vice chancellors asserted:

I would say we must take a sociological model in terms of our approach. You know, the first thing to start with is the female students themselves It's about integrating into our educational system a confidence-building mechanism for young people, and for them to develop a vision of themselves and their capacity to [have] impact.

(A vice chancellor)



Improving the institutional environment and putting in place supportive frameworks for female students comes out strongly. This includes the need for appropriate gender-sensitive policies, service units and supportive training and skilling programmes, mentoring, incubation centres, internship programmes and access to resources for setting up entrepreneurship ventures. The outcomes align with the British Council's holistic approach and theory of change. This calls for creating additional and specific opportunities for women's participation in higher education and sees the need to focus on removing barriers that stand in the way of women's participation as critical (Mott, 2022). It appears that many institutions are failing in this direction, and efforts to solidify policies and their implementations should be the focus of institutions of higher education.

This study also recognises the different layers of the systems which play important roles in how female students are treated. This bio-ecological perspective reflects the idea that female students' interactions with both their immediate environments and systems within larger society influence their well-being. Regarding cultural norms that hinder female students' participation in higher education, the study recognises that the question of culture demands conscientious efforts to handle. This is because culture is a deep-seated belief system, and dealing with culture-based challenges demands a consistent and intensive effort. This understanding about culture led our respondents to make an array of suggestions that include policy frameworks, legislations, working with critical stakeholders and advocacy programmes.

Furthermore, as noted by most stakeholders, there was an awareness from most of the stakeholders of the critical role that international development partners and private sector actors can play in these efforts. They recognise their global influence and the need to have broader perspectives in dealing with these challenges. The roles they can play are financial support, advocacy, capacity building and provision of technical resources.

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