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ACHIEVING SUSTAINABILITY: STUDENTS PERCEPTION OF INSTITUTIONAL SUSTAINABLE DEVELOPMENT PRACTICES AMONG UNIVERSITIES IN SOUTHWEST NIGERIA

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Abstract

This study examined Nigerian universities commitment to sustainable institutional practices in line with universities sustainability implementation framework. The study adopted descriptive survey research design. All undergraduates in public (federal and state) and private universities in Southwest, Nigeria formed the population of the study. Stratified sampling was used to select 3 federal, 3 state and 3 private conventional universities in the six states of southwest Nigeria. Random sampling was used to select 250 students in each of the nine selected universities totaling 2,250 participants. A self-constructed instrument named "Universities Sustainable Development Institutional Practices Questionnaire" (USDIPQ) was administered on the respondents in the study. Data collected were analysed using frequency count, percentage score, mean and standard deviation. The decision rule was placed at 2.50 and it was recommended that Universities in Nigeria should develop a sustainable implementation plan and ensure that the plan puts into perspective the three components of sustainable development.

Keywords: Sustainable Development practices, Achieving sustainability, Nigerian Universities

Introduction

Achieving sustainability through the United Nations Sustainable Development Goals (SDGs) popularly known as the UN Global Agenda has become a priority for member states who have agreed and assented to these goals. The drive to achieve the SDGs by 2030 is on and many nations are working to realise these goals by the set date.

Higher Educational Institutions (HEIs) have been saddled with great responsibilities in providing leadership in the implementation of the SDGs and the ultimate achievement of the goals. Nigerian Universities as signatories to many important declarations such as Talloires Declaration in 1990, Agenda 21 in 1992, the Kyoto Declaration in 1993, Global Higher Education for Sustainability Partnership in 2000, the Luneburg Declaration in 2001, the Sapporo declaration in 2002, Graz Declaration in 2005, Abuja Declaration on Sustainable Development in Africa in 2009, the Rio+20 Higher Education Sustainability Initiative, as well as the UN Decade for Education for Sustainable Development (Babalola, 2019) have signaled their commitments to support the Nigerian government and United Nations aspirations through their primary activities of teaching, research and campus practices and operation (Awuzie and Emuze, 2017). According to Filho et al. (2021), he submitted that research, innovation and sustainable education are the most crucial frameworks for realising the sustainable development (SD) at all levels.

Primarily, universities drive research, teaching and community action, hence universities are in a strategic position to drive SD (Lozano, et al., 2013; Sammalisto, et al., 2015; and Babalola, 2019). Abubakar, Al-Shihri and Ahmed (2016), maintained that universities globally have embraced practical ways in becoming sustainable and in encouraging sustainability through instruction, enquiry, public campaign, and on campus practices. Even though there appears to be a uniform expectation on the role of universities in contributing to the realisation of SD, there seems to be a growing concern whether universities indeed are modeling SD through their teaching, research and sustainable campus practices. Filho (2011), Lozano et al. (2013), Von and Nguyen (2014) and Babalola (2019) expressed that while universities can be said to be fully aware of their responsibilities in actively pursuing the realisation of SD by doing few things, universities appear not to be taking active steps in implementing SD using a whole institutional approach which include teaching for sustainability, research and campus practices as suggested by (Cole and Wright, 2003; Alshuwaikhat and Abubakar, 2008; Filho, 2015; and Babalola, 2019).

Cole and Wright (2003), indicating a university that operates on a sustainable basis as an institution that takes actions on its indigenous and international duties, to safeguard and improve the well-being and safety of persons, environments and develop workable methods of confronting current and future environmental and societal difficulties. In addition, a university can be said to adhere to sustainability when it has healthy surroundings with an efficient ecological administration and thriving fiscal policy based on reduction of waste, power and conservation of resources, waste reduction, and promoting fairness and societal justice in its dealings and transferring these values at municipal, countrywide and international stages(Alshuwaikhat and Abubakar, 2008). A university is viable when it incorporates strategic SD philosophies and principles in the curricular, enquiry and municipal amenities, and as submitted by Abubakar, Al-Shihri and Ahmed (2016) and Babalola (2019). Campus sustainability is also unattainable without integrating such ideologies as water conservation, energy efficiency in buildings and operations, sustainable transportation, efficient waste disposal system, resource management, fairness, and reducing ecological contamination into campus processes. It also contains shared instruction and learning approaches that stimulate and equip learners and the society to change their conduct and act for sustainable development.

Cole and Wright (2003), Lozano, Ceulemans, Alonso-Almeida, Huisingh, Lozano, Waas, Lambrechts, Lukman and Huge (2015) and Abubakar, Al-Shihri and Ahmed (2016), highlighted the sustainable initiatives that universities must of a necessity undertake to be called an institution adhering to sustainable practices.

- Framing and executing strategies and action plans (policies) to make certain that ecological problems are handled steadily and scientifically all through the campus in an effort to lessen ecological effects and intensify operations effectiveness.
- 2. Restructuring and greening the curricula in a way that the emphasis is placed on major sustainability framework like ecological preservation, poverty reduction, pollution control, biodiversity, reduction of poverty, sustainable resource consumption, climate change, global heating, promotion of equity and fairness, educating every member of the society towards sustainable development competencies, values, ideals and knowledge required to evolve a future that is sustainable.
- 3. Building partnership and collaboration with stakeholders such as the students, staff, other institutions, non-governmental

organisations public and private sectors etc. for community impacts, empowerment and mobilisation towards cultivation of sustainable actions for ecological sustainability.

4. Sustainable development evaluation and reporting.

Studies conducted on sustainable development in Nigerian universities have focused on Teaching and learning for sustainability (Omisore et al. 2017), the extent to which curricula implementation in higher education institutions in South Africa, Zimbabwe and Nigeria catered for students knowledge and skills in sustainability (Zhou et al. 2020), the awareness and knowledge gap among undergraduates about SD and the SDGs in Nigerian universities (Babalola, 2019; Babalola, 2022), poor knowledge of sustainable development concepts among preservice teachers (Ogunyemi et al, 2022). Others focused on issues that could make universities sustainable such as effective fiscal management, efficient resource use and conservation but no study has painstakingly examined Nigerian universities all-inclusive institutional practices of sustainable development which is the cause of past findings on awareness and knowledge deficit about SD among undergraduates in Nigerian universities. Therefore, this study examined the institutional sustainable development practices among selected universities in southwest Nigeria.

Statement of the Problem

The role of universities in teaching and learning, research and community action in mobilizing support for the attainment and realisation of the SDGs have been established through various declarations, conventions and academic studies. Even though the role universities are to play in achieving sustainable development is clear, many universities particularly in Nigeria have not wholly committed to an al-inclusive institutional approach to implement sustainable development. Even though there are pockets of activities going on in the pursuit of realising the Sustainable Development Goals, without an all-inclusive institutional commitment, the possibility of achieving sustainability by 2030 will remain a tall dream. Therefore, this study examined Nigerian universities commitment to sustainable institutional practices in line with universities sustainability implementation framework discussed in the study.

Research Questions

- 1. To what extent do universities' academic curricula expose students to the concepts of sustainability in their various academic programmes?
- 2. To what extent do universities' non-academic campus activities demonstrate the practices of sustainable development?

Methodology

The study utilized descriptive survey research design. undergraduates in public (federal and state) and private universities in the Southwest Region of Nigeria formed the population for the study. Multistage sampling was used in the study. Stratified sampling was used to select 3 federal, 3 state and 3 private conventional universities in the six states of Southwest Nigeria. Random sampling techniques was used to select 250 students in each of the nine selected universities, totalling 2,250 participants. A self-constructed instrument titled "Universities Sustainable Development Institutional Practices Questionnaire" (USDIPQ) was used in the study. The instrument was sub-divided into two: Section A was on demographic features of the respondents and it contained 5 items, Section B was on Sustainable Development Practices (Academic non-academic) in Nigerian Universities containing 20 items on a four Likert scale of Not at All, A Little Extent, Some Extent and Great Extent. The instrument was validated by experts and the reliability was determined using Cronbach Alpha reliability analysis which yielded coefficient of .95. A total of 1,884(82%) instruments were retrieved after administration. Data collected were analysed using frequency count, percentage score, mean and standard deviation. The decision rule was placed at 2.50 since a 4 Likert Scale was used.

Results

Research Question 1: To what extent do universities' academic curricula expose students to the concepts of sustainability in their various academic programmes?

Table 1: Summary of the Descriptive Analysis of the Extent that Universities' Academic Curricula expose Students to the Concepts of SD in Various Academic Programmes

6 /5 :	Concepts of 3D				ı	1	CTF
S/N	ITEM	Not at	A Little	Some	Great	Mean	STD.
	TO WHAT EXTENT:	All	Extent	Extent	Extent		
		F (%)	F (%)	F (%)	F (%)		
1	Does your	265	403	500	641	2.17	1.095
	faculty/department	(14.3)	(22.3)	(27.6)	(35.4)		
	offer courses which						
	address topics related						
	to sustainable						
	development?						
2	Is sustainability	261	419	488	630	2.18	1.074
	reflected in your	(14.5)	(23.3)	(27.1)	(35.0		
	course of study?	, ,			,		
3	Does your course of	240	441	504	618	2.17	1.054
	study expose you to	(13.3)	(24.4)	(27.9)	(34.3)		
	the knowledge of	(==:=)	,=,	(=:::=,	,,		
	Sustainable						
	Development?						
4	Does taught courses	238	446	500	600	2.18	1.052
'	in your department	(13.3)	(24.9)	(28.0)	(33.7)		
	relate to issues of	(20.0)	(=,	(_5.0)	(55.7)		
	Sustainable						
	Development?						
5	Will you rate your	243	425	527	597	2.18	1.049
	lecturers' disposition	(13.6)	(23.7)	(29.4)	(33.3	2.10	1.043
	towards sustainability	(13.0)	(23.7)	(23.4)	(55.5		
	discourse in the						
	classroom?						
6	ls your	213	423	543	613	2.13	1.027
	faculty/department	(11.9)	(23.6)	(30.3)	(34.2)	2.13	1.027
	involved in research	(11.5)	(23.0)	(30.3)	(37.2)		
	and projects focused						
	on sustainable						
	development?						
7	Does your university	175	463	651	534	2.15	.953
'	organise periodic	(9.6)	(25.4)	(35.7)	(29.3)	2.13	.533
	,	(9.6)	(23.4)	(33.7)	(23.3)		
	workshops or seminars on						
	sustainable						
	development	244	462	467	F 42	2.24	4 005
8	Does your university	344	463	467	542	2.34	1.095
	organise orientation	(18.9)	(25.5)	(25.7)	(29.8)		
	programme(s) on						
	sustainable						

	development for students in your university?						
9	Will you rate your institution's sensitisation of students towards sustainable development programme?	195 (10.8)	485 (26.9)	604 (33.8)	521 (28.8)	2.21	1.081
10	Do you know if your university has an academic programme on sustainable development.	312 (17.4)	415 (23.1)	546 (30.4)	522 (29.1)	2.29	1.065
	development.						

Weighted mean = 2.2

Table 1 showed the descriptive analysis of response by respondents who took part in the study. It showed that 63% expressed that they had courses that address SD in their departments and faculties, 62.1% expressed that the concept of sustainability reflected in their course(s) of study. On course of studies and taught lectures exposing them to SD knowledge and issues, 62.2% and 61.7% agreed in the affirmative. A good number, 62.7% indicated that their lecturers had a good disposition towards sustainability in classroom discourse while 64.5% believed that their faculty and departments had research focused on SD. Moreover, 65% expressed that their universities organised periodic seminars on SD and 55.5% said their universities did organise orientation programmes on SD for students. Lastly, 62.6% gave a satisfactory rating to their university's students' sensitization efforts towards SD and 59.5% agreed that their universities had an academic programme on SD.

However, even though the results presented a positive description of universities' academic curricula in exposing undergraduates to SD, the weighted mean 2.2 which was the average score of undergraduates' perception of the extent to which their university's curricula exposed them to SD concepts did not meet the established criterion norm of 2.5 this implied that Nigeria universities' curricula is not effective and suitable in exposing undergraduates to SD

concepts thereby reducing their chances of preparing graduates for SD and the realisation of SDGs.

Research Question 2: To what extent do universities' non-academic campus activities demonstrate the practices of sustainable development?

Table 2: Summary of the Descriptive analysis of the Extent that Universities Non-Academic Campus Activities Demonstrate Practices of SD

S/N	TO WHAT EXTENT:	Not at All F (%)	A Little Extent F (%)	Some Extent F (%)	Great Extent F (%)	Mean	STD.
1	Do you know if your university has a research centre on education and policy development for sustainable development?	315 (17.5)	460 (25.5)	493 (27.4)	531 (29.5	2.13	1.075
2	Does your university mission statement reflect its commitment to Sustainable Development?	201 (11.0)	573 (31.3)	547 (29.9)	506 (27.7)	2.26	1.003
3	Does your university encourage students to promote Sustainable Development issues on campus?	251 (13.9)	508 (28.1)	527 (29.2)	521 (28.8)	2.27	1.026
4	Are student groups involved in taking initiatives on Sustainable Development issues in your university?	191 (10.5)	467 (25.8)	560 (30.9)	593 (32.7)	2.14	.994
5	Is energy conserved in your university?	254 (14.2)	395 (22.0)	542 (30.2)	603 (33.6)	2.17	1.055
6	Does your university attempt to recycle solid waste (paper, glass, plastic, metal) in your university?	273 (15.2	365 (20.3)	403 (22.5)	753 (41.9)	2.09	1.115
7	Does your university attempt to conserve water through efficient	241 (13.4)	409 (22.7)	467 (25.9)	685 (38.0)	2.12	1.072

	toilets, harvested rain water, minimal irrigation etc.?						
8	Does your university conserve trees, native plants, minimizing lawn, and integrated pest management?	308 (17.1)	(24.9)	(24.6)	597 (33.2)	2.27	1.123
9	Does your university campus rely on food/daily supplies from the city (vegetables, toiletries, pastries)?	312 (17.4)	415 (23.1)	546 (30.4)	522 (29.1)	2.29	1.065
10	Is sustainable transportation programme encouraged in your university through (bicycle, pedestrian friendly systems, bus programmes, car pools)?	259 (14.5)	436 (24.4)	518 (28.9)	576 (32.2)	2.21	1.050

Weighted mean = 2.19

Table 2 showed that 56.9% expressed that their university has a research centre on education and policy for SD and 61.2% indicated that their university mission statements reflect commitment to SD. More than 57% indicated that their university encourages students to promote SD issues on campus and 63.6% expressed that students' groups are involved in taking SD initiatives on their campuses. About energy conservation, 63.8% indicated that energy use is conserved in their institution and 64.4% expressed that their universities recycle solid wastes. Moreover, 63.9% indicated that their university practice water conservation through harvested rainwater, efficient toilets and minimal irrigation, amongst others and 57.2% indicated that their universities practice conservation of trees, native plants, maintain lawns, etc. Lastly, 59.5% indicated that their universities rely on food/daily supplies (groceries, fruits and vegetable, pastries, etc.) from outside the campus and 61.1% of the students expressed that sustainable transportation such as cycling, pedestrian friendly roads, bus programmes, carpooling etc. is practiced on their respective campuses.

However, even though the results presented a positive description of universities' non-academic campus activities in demonstrating practices of SD, the weighted mean 2.19 which is the average score did not meet the established criterion norm of 2.5 this implies that Nigeria universities' SD practices did not fully demonstrate institutional practices of sustainability.

Discussion

The trend of findings showed that undergraduates indicated that their universities academic curricula exposed them to sufficient knowledge of SD in their academic discipline. The result presents fair attempt universities seem to be making in terms of teaching and learning for sustainability. However, past studies have reported an awareness and knowledge deficit about SD among undergraduates in Nigerian universities (Babalola, 2019; Babalola, 2022; Zhou et al. 2020 and Ogunyemi, et al 2022). They all recommended an institutional curriculum remodelling for effective teaching and awareness for SD.

Critically engaging the result further, one cannot but wonder that if universities in Nigeria do this much for sustainable development teaching and learning through their curricula as claimed by the respondents how then has these practices not increase students' awareness and knowledge of sustainable development concepts and of the SDGs. Previous studies conducted by Abubakar, Al-shiri and Sayed (2016) on campus sustainability in Saudi Arabia showed that there was a strong connection between students' assessment of campus sustainability, sustainability concepts teaching and inculcation of sustainable behaviours among students. Interrogating the findings of Abubakar et al (2015) further implied that if the teaching, sensitisation and practices of campus sustainability inculcate sustainable behaviour among students in Saudi Arabia, why is it that the extent of Nigerian universities campus sustainable practices has not increased the awareness and knowledge on sustainable development among Nigerian undergraduates in past studies bearing in mind that behavioural change hardly occur when knowledge has not taken place.

One of the arguments that could be provided for this result would be that students while responding to the instrument on universities campus sustainability practices in their institution perhaps thought that the outcome of the study would be used in determining

the ranking of universities and as such gave an which they thought would enhance the image of their university if that was the case. Again, it could be that the students merely flowed in the direction of the question as they deemed good for the image of their university. For instance, on Table 2 item 9, a twisted question item that sought to find out if their universities rely on food/daily supplies from the neighbouring communities or cities (vegetables, toiletries, pastries) had more than 59% indicating that their universities rely on supplies from outside the campus. This could probably be a true reflection of other indices of campus sustainable practices of Nigerian universities going by available data and findings from previous studies.

For instance, Ifegbesan, Ogunyemi and Rampedi (2017), in a study conducted on sustainable practices of Nigerian universities maintained that indiscriminate littering, open dumping of wastes, weedy and overgrown lawns, proliferation of power generating sets, uncollected refuse sites and defaced walls with postings are among the major campus sustainability challenges Nigerian universities are still battling with. Filho et al (2018) classified problems confronting Nigerian universities from achieving sustainability as internal and external problems. Internal challenges include: lack of weak performance assessments methods, poor curriculum adaptation to local challenges, strikes/labour actions, lack of academic staff motivation, brain drain, amongst others. External challenges include: teaching staff shortages, external strikes, poor and erratic government funding amongst others. A more recent study by Ogunode (2020) highlighted the challenges confronting Nigerian universities from attaining sustainability to include: lack of articulated strategic plan for sustainability, poor leadership, inadequate funding, ineffective teaching and learning amongst others.

In a broad sense, Filho et al (2018) submitted that universities cannot successfully implement sustainability without long term sustainable planning and initiative as lack of planning remains a major hinderance. Furthermore, there is need for universities to integrate the three sustainability components in a holistic way so that these components become resilient to staff and institutional changes. Lack of financial support remains another major hinderance since most institutions depend on scarce resources to implement sustainability. In essence, the realisation of SD among Nigerian universities requires an

all-inclusive institutional sustainable practice across the three components (environment, economy and social/people) of sustainable development without which achieving the SDGs will remain unattainable.

Conclusion

The role of universities in teaching and learning, research and community action in mobilizing support for the attainment and realisation of the SDGs have been established through various declarations, conventions and academic studies. Therefore, this study examined Nigerian universities commitment to sustainable institutional practices through their various academic and non-academic activities campuses. The study found that academic and non-academic campus activities portrayed universities in Nigeria as institutions moving in the right direction of achieving sustainability. The findings did not meet the minimum standards set before analysing the data collected in the study which implied that universities still have so much to do to achieve an all-inclusive campus sustainability practice. It was recommended that universities should develop a sustainability implementation plan along the three components of sustainable development so as to be able to achieve sustainability along these components.

Recommendations

Based on the findings of this study, the following are the recommendations:

- 1. Universities in Nigeria should develop a sustainable implementation plan and ensure that the plan puts into perspective the three components of sustainable development.
- Universities should integrate the three components of sustainability into teaching, research and campus administration in such a way that they become resilient to staff and institutional changes.
- Greening the curricular, which means incorporating sustainable development principles into teaching and learning, requires universities to remodel their curriculum to reflect sustainability.
- Build necessary partnerships and collaborations with other institutions, governments and non-government agencies that can aid their realisation of the SDGs.

5. Engage in effective reporting of actions and activities the university is engaging in towards the realisation of sustainable development.

References

- Abubakar, I. R., Al-Shihri, F. S. & Ahmed, S. M. (2016). Students' assessment of campus sustainability at the University of Dammam, Saudi Arabia. *Sustainability*, 8(1), 59.
- Alshuwaikhat, H. M. & Abubakar, I. (2008). An integrated approach to achieving campus sustainability: Assessment of the current campus environmental management practices. *Journal of Cleaner Production*. 16, 1777–1785.
- Awuzie, B. & Emuze, F. (2017). Promoting sustainable development implementation in higher education: Universities in South Africa. *International Journal of Sustainability in Higher Education*, 18(7), 1176-1190.
- Babalola, S. O. (2019). Application of 4Ds of curriculum model as paradigm for achieving sustainable development goals in Nigeria. Unpublished Ph.D. Thesis, Department of Arts and Social Sciences Education, University of Ibadan, Nigeria
- Babalola, S. O. (2022). Assessment of the awareness and knowledge gap of curriculum remodelling of education for sustainable development among university students in southwest, Nigeria. *Journal of Science, Technology, Mathematics and Education (JOSTMED)*, 18(3), 315 -326.
- Cole, L. & Wright, T. (2003). Assessing sustainability on Canadian university campuses: development of a campus sustainability assessment framework; Royal Roads University: Victoria, BC, Canada, 2003; p. 30.
- Leal Filho, W. (2015). Transformative approaches to sustainable development at universities. *Working Across Disciplines; Switzerland, Springer: Cham.*
- Filho, W. L. (2011). About the role of universities and their contribution to sustainable development. *Higher Education Policy, 24 (1),* 427-438.
- Ifegbesan, A. P., Ogunyemi, B., &Rampedi, I. T., 2017. students' attitudes to solid waste management in a Nigerian university:

 Implications for campus-based sustainability education.

- International Journal of Sustainability in Higher Education, 18 (7),1244-1262.
- Leal Filho, W., Frankenberger, F., Salvia, A. L., Azeiteiro, U., Alves, F., Castro, P., & Avila, L. V. (2021). A framework for the implementation of the sustainable development goals in university programmes. *Journal of Cleaner Production*, 299, 126915.
- Leal Filho, W., Pallant, E., Enete, A., Richter, B. & Brandli, L. L. (2018). Planning and implementing sustainability in higher education institutions: an overview of the difficulties and potentials. *International Journal of Sustainable Development &World Ecology*, 25(8), 713-721.
- Lozano, R., Ceulemans, K., Alonso-Almeida, M., Huisingh, D., Lozano, F. J., Waas, T. & Hugé, J. (2015). A review of commitment and implementation of sustainable development in higher education: results from a worldwide survey. *Journal of Cleaner Production*, 108, 1-18.
- Lozano, R., Lozano, F. J., Mulder, K., Huisingh, D. & Waas, T. (2013).

 Advancing higher education for sustainable development: International insights and critical reflections.

 Journal of Cleaner Production, 48, 3-9.
- Ogunode, N. J. (2020). Nigerian universities and their sustainability: Challenges and way forward. *Electronic Research Journal of Behavioural Science*, 2 (1), 72 82.
- Ogunyemi, B., Ifegbesan, A., Benedict, H. T., Ogunsanya, A. O., Iyunade, O. T., Olubela, A., ... & Edewor, K. (2022). Knowledge, perceptions and readiness of Nigeria's beginning teachers for sustainability education. *Journal of Teacher Education for Sustainability*, 24(2), 180-194.
- Omisore, A. G., Babarinde, G. M., Bakare, D. P. & Asekun-Olarinmoye, E. O. (2017). Awareness and knowledge of the sustainable development goals in a university community in Southwestern. Nigeria. *Ethiopia Journal of Health Sciences*, 27 (6) 669 676
- Sammalisto, K., Sundström, A. & Holm, T. (2015). Implementation of sustainability in universities as perceived by faculty and staff—a model from a Swedish university. *Journal of Cleaner Production*, 106, 45-54.

- UNESCO (2014). Sustainable development begins with education. How education can contribute to the proposed post-2015 goals. Education for All Global Monitoring Report.
- Von Hauff, M. & Nguyen, T. (2014). Universities as potential actors for sustainable development. *Sustainability*, *6*(5), 3043-3063.
- Zhou, L., Rudhumbu, N., Shumba, J., Olumide, A. (2020). Role of higher education institutions in the implementation of sustainable development goals. In: Nhamo, G., Mjimba, V. (eds)

 Sustainable development goals and institutions of higher education. *Sustainable Development Goals Series*. Springer, Cham. https://doi.org/10.1007/978-3-030-26157-3