IMPACT OF COVID-19 PANDEMIC ON SUSTAINABILITY OF NIGERIAN TERTIARY INSTITUTIONS: A CASE STUDY OF UNIVERSITY OF JOS

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ABSTRACT
The world is faced with the COVID-19 pandemic which has held the economy, especially the educational sector to ransom. School closure, reliance on e-learning and inaccessibility to mitigation strategies are some of the changes and disruptions which the COVID-19 pandemic has brought in the educational sector. This study examines the impact of COVID-19 pandemic on sustainability of Nigerian tertiary institutions, with particular reference to University of Jos. Three research questions were set to guide the study. Cross sectional survey was employed for the study. Data was generated from both primary and secondary sources through the use of Tertiary Institutions Sustainability Checklist (TISC). The population used for the study involved the administrative staff of the University. A sample of 30 (thirty) participants were used for the study. All the sampled staff were given the TISC to fill. Random sampling technique was used for the study. Simple Percentage was used to analyze the research questions. It was found that many tertiary institutions do not have well equipped library for their students and they have poor or non existing internet connectivity, poor ICT laboratory amongst a host of other issues. The study recommends that tertiary institutions should adopt policies the use of modern resources such as the e-library, computers for Skype and zoom to rebuild the losses in the learning process of their students, once they reopen.

KEYWORDS: COVID-19, Education, Pandemic, Sustainability, Tertiary Institutions

1. INTRODUCTION
Education is the greatest force that can be used to bring about change. It is also the greatest investment that a nation can make for the rapid development of its economic, social, political, sociological and human resources. The National Policy on Education (2004) states that tertiary education is the education given to learners after secondary education in universities, colleges of education, polytechnics, and monotechnic including those institutions offering correspondence courses. Abdu (2003) also affirmed that higher education relates to all forms of post-secondary education such as the Universities, Polytechnics, Colleges of Education, Monotechnic and Professional schools. In Nigeria, the demand for tertiary education is high because education is not only an investment in human capital, but also a pre-requisite as well as a correlate for economic development (Adeyemo, 2000).

The need for the sustainability of tertiary institutions can therefore not be overemphasized. The belief that education is a catalyst for growth rests on the quality of education in any country. The National
Policy on Education (2004) stated that education is a government affair in which free education is to be provided by the government at all levels when practicable. The public sector is the major provider and financier of education in Nigeria since it took over most of the schools in the country from primary to tertiary level in the mid-70s. Since the 1980s however, the deteriorating resources of government has put much strain on the sustainability of education. In the quest for development, developing countries have acknowledged that investment in sustainable higher education are viable conditions that facilitate change since the value of education hinges on teaching, learning, research and the production of qualified personnel which are needed for national development (UNESCO, 2020).

Oghenekohwo (2004) classified education sustainability strategies into two regimes namely: Pre-deregulation regime and Deregulation regime. In the pre-deregulation regime, higher education sustainability in Nigeria was done by government. High priority was accorded to the funding of higher education, thereby creating a wrong impression amongst Nigerians that sustainability of higher education is the exclusive preserve of governments. On the other hand, in the deregulation regime, which is mostly a post Structural Adjustment Programme (SAP) inevitability, things began to change. Okebukola (2003) noted that "an additional concomitant of the 'private good' is that, grants have been changed to loans, pacing major burdens on many university graduates".

The sustainability of tertiary education should be the function of all major stakeholders. This is because government alone cannot fund higher education. Sustainability focuses on meeting the needs of the present without compromising the ability of future generations to meet their needs (UNESCO, 2020). Komiyama, Takeuchi, Shiroyama and Mino (2011) stated that the growing interest in promoting the principle of sustainability in the educational sector is evident in observing the evolution of the research topics, scientific contributions and educational programs being adopted and implemented by tertiary institutions. Franzoni and Gennari (2013) further stated that the institutionalization of the principle of sustainability is only achieved when accepted and integrated in the university governance culture and progressively becomes part of the activities implemented. This means that the governance approach of universities should be aimed at enhancing the close interdependence between economic and social efficiency, optimizing performance and involving all the management processes; from research and teaching to administrative and service activities from the top management to the entire institution.

Inability of government to curtail the spread of covid-19 through medical intervention has prompted the widespread closure of tertiary institutions around the world. Many tertiary institutions are considering replacing conventional methods of teaching with online modes. A report by UNESCO (2020) stated that the closure of educational institution has great impact on 91% of the world’s student population. The undulating effect of this pandemic has been felt negatively by educators, students and institutions, as academic sessions were disrupted after the coronavirus was declared a public health
emergency. This has left many students and educators in a rude shock as some of these tertiary institutions were at the point of or were preparing for examination, admission and beginning a new semester, amongst others. This study is motivated by these broad factors; poor budgetary allocation, corruption and the unpreparedness of the educational sector which has contributed to the inability of many tertiary institutions to provide accessible platforms for its students to engage in learning activities during lockdown due to the effect of covid-19 in Nigeria. This has questioned the sustainability of government funded universities in Nigeria which are most affected. The University of Jos is looking for ways to cope and adapt to academic changes as a result of the pandemic.

This research therefore investigates the impact of Covid-19 pandemic on sustainability of Nigerian tertiary institution, with particular reference to the University of Jos.

Statement of Problem
The COVID-19 pandemic ravaging the world has taken a hard toll on many sectors of the economy such as the health sector, tourism sector, educational sector, and has caused a disruption in revenue-generating economic activities in Nigeria. Most Nigerian students are rural dwellers where electricity is unavailable, internet services and even ability to use electronic devices to get information is very poor. Poor budgetary allocation, corruption, poverty and unpreparedness of stakeholders in education are contributing factors to the inability of many tertiary institutions to survive during this global COVID-19 pandemic in Nigeria. The 2010-2019 budgetary allocation to the Nigerian education sector as shown in Table 2 has been very poor and below the fifteen (15) to Twenty (20) percent recommended by UNESCO for developing countries like Nigeria. With budgetary allocations like these come deficiencies that does not allow for growth of sustainable policies. It is based on these that this research is necessitated.

Objectives of the Study
The objective of the study is to investigate the impact of Covid-19 pandemic on sustainability of Nigerian tertiary institutions; however, the specific objectives are to;

i. Determine how tertiary institutions’ calendar can be sustained amidst COVID-19
ii. Identify ways in which Covid-19 can affect tertiary institution’s long term strategic plans.
iii. Examine the extent to which Covid-19 can affect tertiary institution’s financial efficiency.

Research Questions
The following research questions are set to guide the researchers

i. How can tertiary institutions’ calendar be sustained in the midst of COVID 19?
ii. To what extent can COVID 19 affect tertiary institutions’ long term strategic plans?
iii. How can COVID-19 affect tertiary institution’s financial efficiency?
LITERATURE REVIEWED

Coronavirus disease started in 2019. It was later called COVID-19 Pandemic (UN, 2020). Ozili (2020) affirmed that the entrance of covid-19 into Nigeria was through an Italian citizen who came in contact with a Nigerian citizen while on a business trip. The Nigerian subsequently got infected with the coronavirus and it spread to other citizens in Lagos and to other parts of the country. Before the Covid-19 outbreak, Nigeria already had a weak and underdeveloped digital economy. There was hardly any tertiary institution that offered a full educational curriculum online from start to finish. The only services that were offered through the existing digital infrastructure during the Covid-19 outbreak were telecommunication services, digital bank transfers and internet services.

A study conducted by Ozili (2020) outlined that the digital economy would have played a major role in driving recovery from the economic crisis if Nigeria’s digital economy was robust and well-developed. For instance, in Nigerian tertiary institutions can put coursework online so that students quarantined at home don’t have to miss out on key aspects of their education while school is closed or when students can’t get to school. Outside Nigeria, digital technology has helped many businesses to survive the effect of the Covid-19 outbreak and it created an opportunity to enhance the country's digital economy. In the future, a well-developed digital economy in Nigeria achieved through intense digital technology penetration will play a greater role in reducing the effect of recessions in the country, and will also help in supporting economic activities, social activities and the development of good health care systems.

Concept of Sustainability

Sustainability has been a term used to bring balance and create responsibility for economic activity and development. The general and most used definition of sustainability is “meeting the needs of the present without compromising the ability of future generations to meet their needs” (United Nations Environmental Programme, 2020). Harrington (2016) defined Sustainability as the capacity to maintain or improve the state and availability of desirable materials or conditions over the long term. This definition retains the commonly cited characteristics of sustainability and sustainable development as oriented toward the long term, and the basic identification of sustaining any particular conditions or materials as keeping or maintaining them. Pursuit of sustainability or sustainable development implies that the goal is to maintain or improve beneficial conditions (to sustain them), particularly with improved capacity to extend desirable conditions over the long term (Anderies, Folke, Walker & Ostrom, 2013). It is clear that ‘sustainability’ emphasizes maintaining the desirable aspects of natural and/or social conditions and, when possible, improving such conditions, including the status of natural resources. ‘Sustainable development’ focuses on human well-being (OECD, 2011). In sum, the pursuit of sustainability is oriented toward long-term treatment of natural resources, social systems, and people in ways that are consistent with human well-being and dynamic system stability.
Theoretical Framework

The theory used in this study is the constructivism theory. This theory states that learning takes place through active participation and construction of the learning material. This according to Elliott, Kratochwill, Cook and Travers (2000) helps to give the learner to learn with ease because the materials developed were based on his or her personal experience. Arends (1998) stated that constructivism believes in personal construction of meaning by the learner through experience. According to this theory, meaning is gotten through interaction with the material using one’s prior knowledge of it. Constructivism’s central idea is that human learning takes place through construction of ideas using prior knowledge to gain new knowledge. The prior knowledge influences the new or modified knowledge an individual constructs (Phillips, 1995). This theory is relevant to this study because it emphasizes that learners will be more knowledgeable and experienced if they are taught to actively participate in the learning activities through zoom, Skype, WhatsApp etc. Learners will actively participate in the learning process if computer softwares are made available to support education in tertiary institutions rather than using the conventional method of learning in this current new normal and restrictions.

METHODOLOGY

Survey research design was used for the study. Specifically, cross-sectional survey design was employed for the study. Tertiary Institutions Sustainability Checklist (TISC) which was developed by the researchers was administered on the participants.

The population used for this study consisted of administrative staff of the University of Jos. They were chosen because the researchers believe that by virtue of their position as administrative staff in the institution, they must have knowledge of challenges being faced by the staff and students in their institution.

The researchers adopted the simple random sampling technique to obtain the participants used for the study. This technique is considered suitable because it gives every member of the population chance to be selected for the study. Therefore, thirty (30) participants were randomly selected for the study.

Data for the study was obtained from both primary and secondary sources through the use of checklist, review of relevant topics from journals, textbooks and via internet. Thirty (30) copies of the checklists were administered and only twenty-seven (27) copies were received. These were the ones that were analyzed using simple percentage.

Table 1: Responses
| S/ N | Checklist Question                                                                 | RESPONSES   | Freq | %   | Aggregate Response(%) |
|------|-----------------------------------------------------------------------------------|-------------|------|-----|------------------------|
| 1    | Tertiary institutions should seek and adapt existing online platforms to create online courses | AGREED      | 27   | 100 | AGR: 83.9              |
|      |                                                                                  | DISAGREED   | NIL  |     | DISAGR: 16.0           |
|      |                                                                                  | UNDECIDED   | NIL  |     |                        |
| 2    | Tertiary institutions should train instructors on how to teach remotely, allowing each academic staff to define their own plan for content, goals, and learning assessment | AGREED      | 16   | 59.2|                        |
|      |                                                                                  | DISAGREED   | 11   | 40.7|                        |
|      |                                                                                  | UNDECIDED   | NIL  |     |                        |
| 3    | An institutional policy for assessing current term student performance as relates to progression and grading should be set | AGREED      | 25   | 92.5|                        |
|      |                                                                                  | DISAGREED   | 2    | 7.4 |                        |
| 4    | Planned capital projects will be postponed                                       | AGREED      | 23   | 85.1|                        |
|      |                                                                                  | DISAGREED   | 4    | 14.8|                        |
|      |                                                                                  | UNDECIDED   | NIL  |     |                        |
| 5    | COVID-19 has caused lay off of part-time staff who have been recruited because of their practitioner experience | AGREED      | 14   | 51.8|                        |
|      |                                                                                  | DISAGREED   | 13   | 48.1|                        |
|      |                                                                                  | UNDECIDED   | NIL  |     |                        |
| 6    | Loss of research including research collaborations across institutions, borders, and disciplines is attributable to COVID-19 | AGREED      | 26   | 96.2|                        |
|      |                                                                                  | DISAGREED   | 1    | 3.7 |                        |
| 7    | Short term unanticipated expenses will threaten tertiary institution’s solvency   | AGREED      | 27   | 100 | AGR: 96.2              |
|      |                                                                                  | DISAGREED   | NIL  |     | DISAGR: 3.7            |
| 8    | COVID-19 will cause a reduction in institution’s turnover                         | AGREED      | 27   | 100 |                        |
|      |                                                                                  | DISAGREED   | NIL  |     |                        |
| 9    | Tertiary institutions ability to finance capital projects is hampered.            | AGREED      | 24   | 88.8|                        |
|      |                                                                                  | DISAGREED   | 3    | 11.1|                        |
|      |                                                                                  | UNDECIDED   | NIL  |     |                        |

Source: Survey Data, 2020

Results and Discussion of Findings
Table 1 represents responses of the participants after administering the Tertiary Institutions Sustainability Checklist (TISC). From the table above, there are a total of 27 participants. Research question one (1), 83.9% of the population agreed that creation of online learning platforms and tutoring of instructors will help sustain tertiary institution’s academic calendar, while 16.0% of the population disagreed. For research question two (2), 77.7% of the population agreed that COVID-19 pandemic causes capital projects and contract staff of the institution to be laid off, while 22.2% disagreed. In research question three (3), 96.2% of the population agreed that the COVID-19 pandemic increases tertiary institution’s financial efficiency ratio, 3.7% of the population disagreed. No respondent ticked the undecided column on each of the checklist questions. This means that all the respondents had
knowledge of the impact of covid-19 on sustainability of tertiary institutions.

| Year | Budget | Education allocation | Percentage |
|------|--------|----------------------|------------|
| 2010 | 5.160  | 249.09               | 7.25       |
| 2011 | 4972   | 306.3                | 6.16       |
| 2012 | 4.877  | 400.15               | 8.20       |
| 2013 | 4.987  | 426.53               | 8.55       |
| 2014 | 4.962  | 493                  | 9.94       |
| 2015 | 5.068  | 392.2                | 7.74       |
| 2016 | 6.061  | 369.6                | 6.10       |
| 2017 | 7.444  | 550                  | 7.38       |
| 2018 | 9.12   | 605.8                | 7.03       |
| 2019 | 8.83   | 462.24               | 5.23       |
| Total| 61.481 | 4.564                | 7.423      |

Source: vanguardngr.com 2019

In 2010, the Federal Government allocated N249.09 billion (4.83%) of its N5.160 trillion budget to education. There was a marginal improvement in 2011 when education got N306.3 billion (6.16%) of the N4.972 trillion budget. The marginal improvements continued in 2012 (8.20%), 2013 (8.55%), and 2014 (9.94%) until 2015 (7.74%) when a significant drop in allocation to education was recorded. In 2016, the sector had its second-worst allocation in 10 years when only N369.6 billion (6.10%) of the N6.061 trillion budget was appropriated for education. However, there was a slight rise in 2017 (7.38%). It dropped a little in 2018 to 6.64% as education got N605.8 billion out of the N9.12 trillion expenditure.

Summary of Findings, Conclusion and Recommendations

Summary of Findings
Tertiary institutions in developed countries are better prepared and equipped to face any challenge through adequate budgetary allocations to the education sector. In developing countries such as Nigeria, it was found that the reverse is the case. Education ministry is often one of the ministries that receive least budgetary allocations. There is inequality of educational opportunities among the citizens. Many tertiary institutions do not have well-equipped libraries for their students. They have poor or non-existing internet connectivity, poor ICT laboratory and so forth.

CONCLUSION
The global lockdown of education institutions has caused major setback and interruption in students’ learning both at the primary, secondary and tertiary institutions. Schools need modern resources such as the e-library, computers for Skype, zoom and so forth to rebuild the losses in the learning process.
of their students, once they reopen. These resources if adequately provided and use will normalize the learning process of students in schools. Based on these, the researchers conclude that the use e-learning can effectively control the spread of COVID-19 pandemic greatly and have less or no negative impact on academic or financial plans of tertiary institutions.

RECOMMENDATIONS
Based on the findings, the researchers recommend that:

1. Tertiary institutions should take the advantage of the use of social networks such as; WhatsApp, Skype, Zoom, Internet, Radio, TV amongst others to effectively communicate with parents, teachers and students on the way forward for students to continue with their education in case there is a serious challenge such as the Corona Virus pandemic. Remote learning is not only about online learning, but about mixed media learning, with the objective of reaching as many students as possible.

2. Government should be more proactive in handling public universities administration to prepare lecturers and students in the use of ICT and e-learning for any eventuality like the new normal which was not expected by any government the world over

3. Tertiary institutions should be proactive in ameliorating the challenges identified in this study and imbibe the e-learning for use in the post COVID-19.

4. Government should infuse more monetary resources in the education sector so that tertiary institutions of learning can be adequately equipped

5. Universities lecturers should embark on aggressive research and the research results implement to slow or eradicate the spread of the corona virus. This will enhance the health and safety of all students and staff in the campuses.

6. Tertiary institutions should adapt existing online platforms to upload their students’ course online for continuity of schooling in the tertiary institutions

7. Government should always avoid or minimize as much as possible those differences in opportunities to increase the budget allocations to education with a view to curb any negative effect of eventuality on academic activities and the nation at large.

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