

Contents lists available at ScienceDirect

Data in Brief





Data Article

Dataset on spatial distribution and location of universities in Nigeria

G.A. Adeyemi^a, S.O. Edeki^{b,*}

ARTICLE INFO

Article history: Received 16 January 2018 Received in revised form 17 April 2018 Accepted 24 April 2018 Available online 1 May 2018

Keywords: Educational system Nigeria universities Geographic Information System Data

ABSTRACT

Access to quality educational system, and the location of educational institutions are of great importance for future prospect of youth in any nation. These in return, have great effects on the economy growth and development of any country. Thus, the dataset contained in this article examines and explains the spatial distribution of universities in the Nigeria system of education. Data from the university commission, Nigeria, as at December 2017 are used. These include all the 40 federal universities, 44 states universities, and 69 private universities making a total of 153 universities in the Nigerian system of education. The data analysis is via the Geographic Information System (GIS) software. The dataset contained in this article will be of immense assistance to the national educational policy makers, parents, and potential students as regards smart and reliable decision making academically. © 2018 Published by Elsevier Inc. This is an open access article under the CC BY license

(http://creativecommons.org/licenses/by/4.0/).

Specifications table

Subject area More specific subject area Type of data How data was acquired Education
University settings and locations
Tables, maps
University commission, GPS coder

E-mail address: soedeki@yahoo.com (S.O. Edeki).

^a Department of Civil Engineering, Covenant University, Ota, Nigeria

^b Department of Mathematics, Covenant University, Ota, Nigeria

^{*} Corresponding author.

Data format Experimental factors Experimental features Data source location Data accessibility Raw and Analysed Spatial concentration analysis Universities distribution and location University commission, Nigeria Within this article, and Supplementary files

Value of the data

- The data will be of great importance in the Nigerian educational planning since education is a tool of critical value to the well-being of any nation [1,2].
- The dataset can enhance quality decision making in the educational system.
- The dataset can help to know where new universities are needed.
- The dataset will be of great help in resource management [3].
- Availability of this data as being represented in the maps will enable parents and potential students to easily identify universities within their catchment areas thereby making right decision on their choices of universities [3,4].
- Publicizing this data will no doubt bring about development mainly in those areas with reasonable number of institutions because investors and business tycoons will be attracted.
- Geographic Information Systems (GIS) enhances qualitative transformational graphic data presentation to enhance quick understanding and accurate decision making in a problem solving environment.

1. Data

In any nation, the importance of accessibility to quality educational system, and the location of educational institutions cannot be overlooked. Hence, the need of better descriptive models such as the Geographic Information System (GIS) whose effectiveness in data representation for both qualitative and qualitative decision making in a problem solving environment cannot be over emphasized [5–7]. This research considers a very distinct way of data representation using a case study of Nigerian Universities. This article contains a total of the 153 universities in the Nigerian system of education as at December 2017. This by nature of institutions are the 40 federal universities, 44 states universities, and 69 private universities. The data analysis is via the Geographic Information System (GIS) software. In Tables 1–3, we present a concise descriptions of the nature of universities: Federal, state and private (we make reference to Supplementary files). In Figs. 1–4, the maps obtained via the GIS software are presented. Fig. 5 contains the graphical representation of University-categories in Nigeria.

2. Experimental design, materials and methods

2.1. Data analysis

See Tables 1-3 and Figs. 1-5.

Table 1 Federal universities in the Nigeria setting.

Federal universities in number	Concerned States in number	Frequency
1 2 Cumulative	34 3	34 6 40

Table 2State universities in the Nigeria setting.

State universities in number	Concerned States in number	Frequency
1	31	31
2	05	10
3	01	03
Cumulative		44

Table 3 Private universities in the Nigeria setting.

Private universities in number	Concerned States in number	Frequency
1	10	10
2	3	06
4	5	20
5	3	15
7	1	07
11	1	11
Cumulative		69

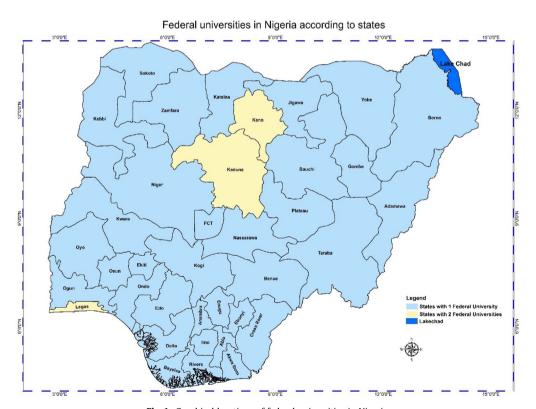
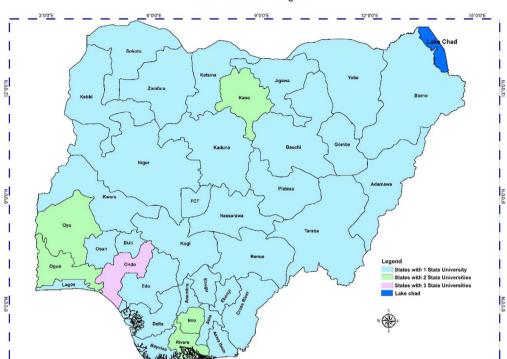


Fig. 1. Graphical locations of federal universities in Nigeria.



State universities in Nigeria

Fig. 2. Graphical locations of state universities in Nigeria.

2.2. A note on the analysis

From Table 1, there are 40 federal universities while 2 states have 3 federal universities each and 34 have 1 federal university each. Note: the Federal Capital Territory (FCT) is included. In Table 2, we have 31 states with 1 state university each, 5 states with 2 state universities each and 1 state with 3 state universities. In Table 3 we have 10, 3, 5, 3, 1, and 1 state(s) with 1, 2, 4, 5, 7, and 11 private universities respectively. It is obvious from the information (Table 3 and Fig. 3) that most states do not have private universities.

2.3. Effects on national growth: unemployment and underemployment

Low level of education due to reasons such as personal interest, lack of awareness in terms of educational importance, poor educational background, and so on has in no doubt affected the employment level of the country leading to adverse effects in area of national growth and development. According to Labor Force Statistics Vol 1: *unemployment and underemployment report* (NBS 2017) [8], states like Kastina, Jigawa, Gombe and Yobe witnessed highest underemployment rates during the concerned period of exercise 2017. The recorded percentages (%) for these states are 46.19%, 43.01%, 39.06%, and 38.38% respectively (Fig. 3). On the other hand, Rivers state, Akwa-Ibom state, Bayelsa state, and Imo state recorded highest level of unemployment with the respective percentages as follows: 41. 82%, 36.58%, 30.36%, and 29.47% (Fig. 4). This is traceable to the effect of migration caused by the less educational privilege states. The effect of volatility on the economic growth and development of any nation cannot be ignored: this include macroeconomic volatility in relation to finance and education [9–15].

Private universities in each of the states in Nigeria

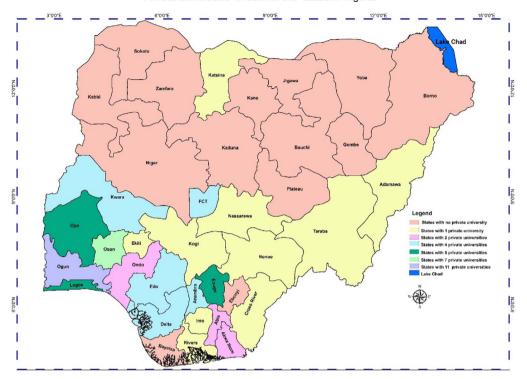


Fig. 3. Graphical locations of private universities in Nigeria.

Total universities in each of the states in Nigeria

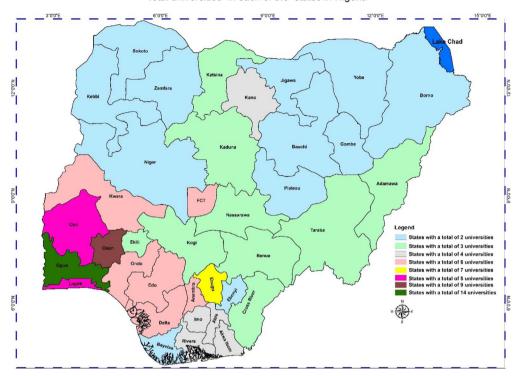


Fig. 4. Graphical locations of all universities in Nigeria.

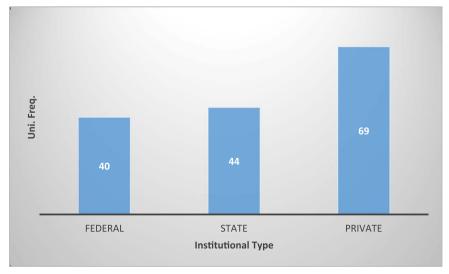


Fig. 5. Graphical representation of university-categories in Nigeria.

Acknowledgements

The authors are grateful to Covenant University for the provision of resources, and enabling working environment.

Transparency document. Supporting information

Supplementary data associated with this article can be found in the online version at http://dx.doi. org/10.1016/j.dib.2018.04.093.

Appendix A. Supporting information

Supplementary data associated with this article can be found in the online version at http://dx.doi. org/10.1016/j.dib.2018.04.093.

References

- [1] F.O. Iyoha, S. Ojeka, A. Ajayi, Impact of state institutions on the quality of accounting practice in Nigeria, in: Proceedings of the 22nd International Business Information Management Association Conference, IBIMA3, pp. 2036–2044, 2013.
- [2] S.I. Popoola, A.A. Atayero, J.A. Badejo, T.M. John, J.A. Odukoya, D.O. Omole, Learning analytics for smart campus: data on academic performances of engineering undergraduates in a Nigerian Private University, Data Brief (2017), http://dx.doi.org/10.1016/j.dib.2017.12.059.
- [3] C.O. Taiwo, The Nigerian Education System: Past Present and Future Lagos, Thomas Nelson (Nigeria) Ltd. (1980) 66-90.
- [4] O.O. Fabiyi, S.A. Ogunyemi, Spatial distribution and accessibility to post primary educational institution in Ogun State, South-western Nigeria: case study of Yewa South Local Government Area, Niger. J. Sci. Res. Rep. 5 (7) (2015) 542–552 (Article no.|SRR.2015.121).
- [5] J. Owolabi, Quantitative Methods of Educational Planning, Lucky, Odoni Enterprises Nigeria, Moboroda (2006) 40-79.
- [6] A.O. Ajayi, F.O. Iyoha, O.A. Olusanmi, An analysis of compliance of accounting information systems in Nigeria and international federation of accountants' education standard, in: Proceedings of the 22nd International Business Information Management Association Conference, IBIMA3, pp. 2284–2296, 2013.
- [7] J.M. Mendelsohn, Education Planning and Management, and the Use of Geographical Information Systems, UNESCO Publishing, International Institute for Educational Planning, 1996 (ISBN 92-803-1158-1).
- [8] NBS-National Bureau of Statistics, Nigeria, 2017.
- [9] S.O. Edeki, M.E. Adeosun, E.A. Owoloko, G.O. Akinlabi, I. Adinya, Parameter estimation of local volatility in currency option valuation, Int. Rev. Model. Simulations 9 (2) (2016) 130–133.
- [10] G. Ramey, V.A. Ramey, Cross-country evidence on the link between volatility and growth, Am. Econ. Rev. No. 85 (5) (1995) 1138–1151.
- [11] S.O. Edeki, O.O. Ugbebor, E.A. Owoloko, On a dividend-paying stock options pricing model (SOPM) using constant elasticity of variance stochastic dynamics, Int. J. Pure Appl. Math. 106 (4) (2016) 1029–1036.
- [12] S.O. Edeki, E.A. Owoloko, O.O. Ugbebor, The modified Black-Scholes model via constant elasticity of variance for stock options valuation, AIP Conf. Proc. 1705 (2016) 4940289.
- [13] P. Benigno, L.A. Ricci, P. Surico, Unemployment and productivity in the long run: the role of macroeconomic volatility, NBER Working Paper, No. 16374, 2010.
- [14] S.O. Edeki, O.O. Ugbebor, E.A. Owoloko, Analytical solutions of the Black–Scholes pricing model for European option valuation via a projected differential transformation method, Entropy 17 (11) (2015) 7510–7521.
- [15] A. Dabušinskas, D. Kulikov, M. Randveer, The impact of volatility on economic growth. Working Paper No. 2012–2017. Bank of Estonia, 2013.