

Nigeria and the Challenge of Energy

By

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Federal Republic of Nigeria



Green means Agriculture
White means peace & unity

Named Nigeria by Flora Shaw
Independence: 1st October 1960
36 states and capitals
Abuja – Federal Capital Territory

Size is 923,768 sq km (356,667 sq mi)

Bounded by

Niger – in the north

Benin – in the west

Chad and Cameroon - in the east

Atlantic ocean – in the south

People, Language Ethnic groups

Over 250 ethnic groups



Yoruba 21%



Igbo 18%



Hausa/Fulani 29%

Official language: English

Over 500 spoken languages (Adegbija, Efurosibina E. (2003). *Multilingualism: a Nigerian Case Study*. Africa World Press.)

Population

140 million people (2006 census figures, <http://www.nigeriamasterweb.com/Nigeria06CensusFigs.html>)

It is said that 1 in every 6 African is a Nigerian

Countries and Areas Ranked by Population:2011

Rank	Country or Area	Population
1	China	1,336,718,015
2	India	1,189,172,906
3	United States	311,050,977
4	Indonesia	245,613,043
5	Brazil	203,429,773
6	Pakistan	187,342,721
7	Nigeria	165,822,569
8	Bangladesh	158,570,535
9	Russia	138,739,892
10	Japan	127,469,543

Countries and Areas Ranked by Population:2050

Rank	Country or Area	Population
1	India	1,656,553,632
2	China	1,303,723,332
3	United States	422,554,384
4	Nigeria	402,425,535
5	Indonesia	313,020,847
6	Pakistan	290,847,790
7	Ethiopia	278,283,137
8	Brazil	260,692,493
9	Bangladesh	250,155,274
10	Philippines	171,964,187

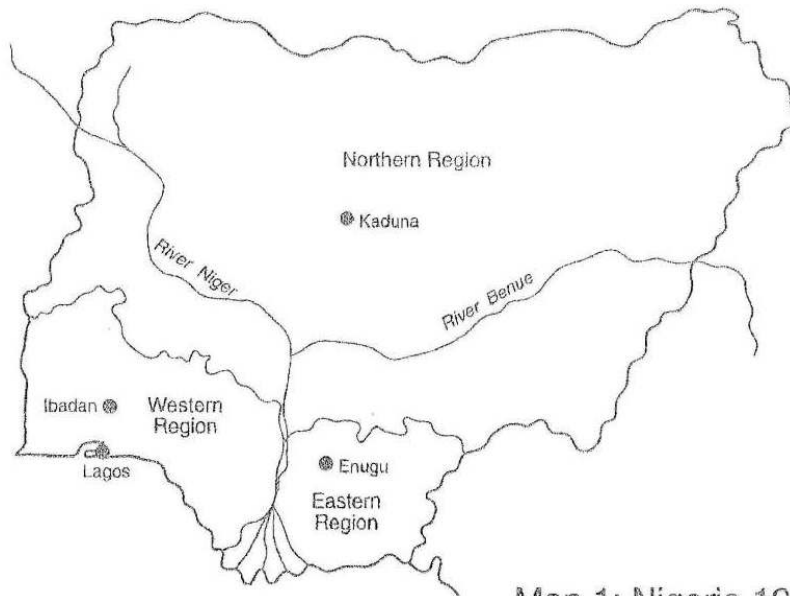
Source: U.S. Census Bureau, International Data Base,
<http://www.census.gov/population/international/data/idb/rank.php>

Pre - Independence

Became a British protectorate in 1901

North and South amalgamated in 1914

Ruled by 9 British Governor Generals from 1914 to 1960



Map 1: Nigeria 1954

The three regions created by British colonial rule in 1954.



Present 36 states and capitals.

Post Independence

Nigeria's biggest problem since independence has been its political instability. This is strongly related to the ethnic differences. To date, Nigeria has had 14 Presidents in her 51 years of independence.

Civilian presidents	Military presidents
Dr. Nnamdi Azikiwe -1960 to 1967	
	Gen. Aguiyi Ironsi - Jan 1966 to July 1966
	Gen. Yakubu Gowon – 1966 to 1975
	Gen. Murtala Mohammed – 1975 to 1976
	Gen. Olusegun Obasanjo – 1976 to 1979
Alh. Shehu Shagari – 1979 1983	
	Gen. Muhammadu Buhari – 1983 to 1985
	Gen. Ibrahim Babangida – 1985 to1993
Ernest Shonekan – Aug. 1993 to Nov. 1993	
	Gen. Sani Abacha – 1993 to 1998
	Gen. Abdulsalam Abubakar 1998 to 1999
Gen. Olusegun Obasanjo – 1999 to 2007	
Alh. Umaru Yar'Adua – 2007 to 2010	
Dr. Goodluck Jonathan -2010 till date	

The ethnic differences led to the Nigerian civil war (July 1967 to Jan. 1970).

Resources

Prior to the discovery of crude oil, Nigeria's economy was largely based on agriculture. The country used to be the world's largest exporter of cocoa, groundnut and palm oil. Now the country ranks 4th in the global production of cocoa, and the famous groundnut pyramids of the 1960s have all disappeared.



Groundnut pyramids. Kano, Nigeria



Farmers working in a cocoa farm. Ikom Nigeria

Other underexploited resources in Nigeria include coal, gold, bitumen, iron ore and uranium.

The economy is dependent largely on crude oil which accounts for 80% of Government earnings and 40% of the GDP.

Electricity Power Generation



- 40% of population connected to National grid
- No power supply more than 60% of the time
- 4000 MW available of 15000 MW required
- Projected 2015 demand set to about 28000 MW

Nigeria's electricity sources

Source	% Contribution
Hydropower	36
Thermal (Gas and Oil)	64 (39 & 25 respectively)

Source: Energy Commission of Nigeria.

<http://www.energy.gov.ng>

Source: "Nigerian National Electricity Grid." Global Energy Network Institute

www.geni.org/globalenergy/library/national_energy_grid/nigeria/nigeriannationalelectricitygrid.shtml

As at 2009, an estimated 60 million Nigerians own a generating set and spend about N1.56 trillion (\$13.35 million) to fuel them annually. *Source :Vanguard Newspaper, 26th January 2009.*

The majority of the population who can't afford electricity relies on fuelwood to even cook a meal. It is estimated that about 79000 people have died from health related issues associated with inhaling smoke from fuelwood (<http://greennigeria.wordpress.com/2011/08/11/a-nigerian-quest-for-better-use-of-wood-fuel>)



A lady using fuel wood to cook



Telecommunication masts relies on company installed generators
source: (<http://www.trussnetltd.com/pictures.php>).

The country's reliance on personal generators increases the price of goods and services.

Energy form	Policies
Oil	Increase refining capacity Endorse exploration looking for more oil reserves Privatize the oil industry Derive more economic benefits from the oil reserves
Natural Gas	Utilize the nation's NG reserves into the energy mix More gas exploration Encourage privatization Eliminate flaring by 2008
Tar Sands	Encourage tar sands exploration driven by the private sector Extract oil from tar sands
Coal	The nation will resuscitate the coal industry for export in an environmentally friendly manner
Nuclear	Pursue nuclear as part of the energy mix
Hydropower	Fully harness the hydropower potential (in particular smallscale) through environmentally friendly means and through the private sector Promoting rural electrification through SHP
Fuelwood	Promote the use of alternative energy sources to fuelwood De-emphasize fuelwood as part of the nation's energy mix
Solar	Help develop the capabilities to utilize solar energy
Biomass	Promote biomass as an alternative energy resource
Wind	Help develop capabilities to utilize wind energy
Hydrogen	Help develop local production capacity for hydrogen
Other renewable	Will remain interested in other emerging energy sources.

Source: Julia Kennedy-Darling *et al* "The Energy Crisis of Nigeria An Overview and Implications for the Future" University of Chicago