

Brain drain and sustainable development in Nigeria, 2000-2015

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Abstracts

The study examined brain drain and sustainable development in Nigeria. One of the major concerns about brain drain is the erosion of highly skilled professionals, especially in the health and education sectors of Nigeria. The objectives of the study were to (i) Identify how the sustainable depletion of healthcare and education professionals through brain drain affects sustainable development. (ii) Examine the measures taken by the Nigerian government to halt the country's brain drain. The study used the push-pull theory of migration as the theoretical framework. The theory establishes that socio-economic conditions have been potent push-factors in the growing phenomenon of brain drain in Nigeria. On the other hand, the pull factors are the prosperity elements in the rich countries, which are nicknamed "greener pastures" by Nigerian professionals who migrate to those countries. The study made use of a secondary method of data collection. The findings of the study reveal that the sustained depletion of the stock of Nigeria's health and educational professionals through brain drain necessarily leads to inefficient health care delivery in Nigeria. Although it has also contributed to the lowering of the standard of education in the country, the crop of academics that are available have been doing their best to improve the standard of education in Nigeria. It was recommended, among other things, that enhanced remuneration and a good working environment would help to reduce the level of brain drain and hence enhance sustainable development.

Introduction

Migration of people from one place to another in different countries around the world in search of better living conditions predates history. Since the contact of western society with the rest of the world, migration has been on the increase. Internally, the movement of manpower from one job to another within a country is evident in all nations. There has been a movement of people from the rural areas to the urban areas in search of better conditions for living. Consequently, any manpower asset who sees any opportunity in another organization moves to such an establishment. This does not impact negatively on the advancement of such societies, but the mass movement of human capital from poor countries to rich countries has begun to impose some traits on the human capital available to such developing countries.

International migration has recently widened in scope and become very complex. According to Uzuegbunam (2017), global migration has increased by nearly 5%. This is about 221 million in 2010 and 232 million in 2013. Recently, international migration has increased globally and most of the migrants are found in only 10 countries, with the United States of America accommodating about 20 percent of all international migrants (United Nations, 2014). However, international migration from one country to another is

still a rare issue in world development, and as such, only about 3.2 percent of the world's population is affected by it. The migrants are scattered throughout Europe, America, Canada, and Asia, especially in the Gulf States of the Arab world. Nigeria and other African countries have very few international migrants, as do the Gulf States of the Arab world. These migrants have contributed to development in various ways in these countries. They can fill up labour vacancies, complement native workers' skills, create jobs, and contribute to social welfare and even pension remittances back to their home countries.

However, despite the positive impact of having international migrants, migration can undermine and exert negative effects on the development and sustainable development of a nation, especially in developing countries like Nigeria, in health care and education, as well as science and technology. Umal and Obidike (2013) stated that the level of brain drain in Nigeria over the years has left the country in a state of inadequate and inappropriate manpower for development and sustainable development. Initially, the scope of emigration was small as people left in trickles for the purpose of self-enhancement through the acquisition of higher academic level from the well-developed academic system of the developed countries for national and sustainable development; and the effect on the country was positive as the quality of its human capital was greatly enhanced. However, contemporary emigration is different in terms of these parameters; it is increasingly widespread in scope, and its main purpose is for personal considerations of survival and escape from the socio-economic and political problems of the domestic economy. Its effect is far-reaching as it erodes the country's vital human capital base, especially in the education and health sectors, which are prominent for national and sustainable development.

Brain drain is a global phenomenon which has continued and intensified due to low living standards, poor remuneration, unemployment, and insecurity. According to the IMF (1999), 74% of African immigrants to the United States are highly educated, with Nigeria accounting for 95,000 of the 128,000 Africans who arrive each year. Although brain drain is considered a global phenomenon, its degree of occurrence varies from one country to another (Anekwe 2009). While its occurrence is very minimal in the developed world, it is endemic in underdeveloped nations. However, this cannot be divorced from the fact that factors prompting brain drain in underdeveloped countries are well addressed in developed countries.

Education is another sector that has been adversely affected by the brain drain in Nigeria, and in fact, the entire African continent. The growing incapacity of the education and health sectors due to poor funding and a crisis of autonomy were issues relating to careers, job satisfaction, and career growth. According to Yaqub (2007) and Nwozor (2010), academics' purchasing power was eroded as a result of the lack of research grants and empty libraries, and academics whose career progression was dependent on research and the number of publications faced additional challenges, unlike their counterparts in the non-academic sector. Also, teachers at different strata of educational institutions were poorly remunerated and teaching materials such as relevant books, journals, etc were not readily available for teaching and research. Many lecturers in

universities and other tertiary institutions were dissatisfied with their jobs, and many of them left Nigeria at the earliest opportunity. According to Effianga and Nwaoku (2010), sustainable development is defined as a regularization of the means of living that provides adequate improvement on previous ways of living in response to contemporary life exigencies, with full awareness of the need to act in ways and manners that would ensure continued existence and adequate comfort to succeeding generations. Effianga and Nwaoku strongly concur with Agyeman et al. (2003) when they assert that sustainable development is: "the need to ensure a better quality of life for all, now and into the future, in a just and equitable manner".

Sustainable development has been defined by the World Commission on Resources and Development to mean development that meets the needs of the present without compromising future generations (Hiebert and Reed, 2009, Chikeleze, 2012). The trend of brain drain in recent times has been compromising the future generation if not checked.

Statement of the problem

Human resources are central to the health care system of any country and essential to the delivery of services (Iwu 2014). Therefore, the positive contributions of a country's health workforce to its socio-economic challenges as well as economic growth are somewhat indisputable (Connell et al., 2007). For instance, without a healthy workforce in any organisation, the organisation's productivity would be depressingly affected. Doctors and nurses are the linchpins of any healthcare system. In countries already severely deprived of health professionals, the loss of each one has serious implications for the health of the citizens. It has to be recognized that brain drain is not just an African problem but has particularly devastating effects on developing countries because of the already fragile health systems (Pink, Hall, and Leatt 2004). Most developing countries in Africa are desperately in need of valuable professionals and personnel to develop their workforce, but ironically, several bright, highly skilled people that are contributing enormously to the gross domestic product of their host countries are from the developing countries of Africa, including Nigeria. In 2006, WHO estimated that there was a shortage of more than 4.3 million health personnel across the world, with developing countries particularly hard-hit. The Africa Working Group (2006) argues that the loss of skilled health professionals and researchers creates serious problems in ensuring the future training and supply of quality health workers and also the impact on the quality of care and education services provided. The few health professionals that remain are faced with heavy workloads due to shortages and poor workforce management, and this increases the frustrations of those workers. These factors then serve as a further push for migration (The Africa Working Group, 2006), turning the whole scenario into a vicious circle. Furthermore, the Organization for Economic Cooperation and Development (2010) noted that despite the recent trends in some countries showing stabilization or declines in health worker immigration, globally, developed countries continue to see a rise in health worker immigration and developing

countries continue to face critical shortages. This has become a concern because the exodus of Nigerian health care professionals is apparently causing the sector to progress in reverse order. The mass emigration of these skilled workers has continued unabated over the years.

Also, a national census conducted by the United States in 2004 reveals that 3.24 million Nigerians live in America alone. Some 202,000 are medical professionals, 174,000 are experts in information technology, and 250,000 are experts in different areas, including university teachers (Adebayo 2010). This leads to a diminishing quality of healthcare in the region struck by poverty, diseases, and epidemics. Yusuf (2007) posits that the more health workers the region loses, the less able they are to cope with the ill-health and mortality as they are dependent on the care of the remaining health workers. Shin (2002) notes that more than 2,000 Nigerian doctors and 10,000 academics work in the USA alone, and overall, more than 50,000 Africans with PhDs live and work outside Africa. He further details that more than 50% of those initially travelled to study, while 30% sought professional development. Chukwunwike (2003) corroborates this by indicating that 23,000 qualified academic professionals emigrate annually to Europe and the US. The Online University (2011) reveals that 11-17 million Nigerians live outside the border and corroborates that at least 20,000 doctors and 10,000 academics work in the US alone. The IMF (1999) pointed out that most of the approximately 128,000 annual African immigrants to the U.S. are highly educated. Out of these, about 95,000, representing 74%, are Nigerians.

The education sector has also experienced the movement of highly skilled qualified academics to overseas countries for greener pastures. The poor infrastructural facilities and inadequate funding of our educational institutions, particularly at the tertiary level, has increased brain drain among Nigerian academics, who leave the country for better facilities and more attractive remuneration in developed countries. Thus, academic brain drain has been on the increase. Although Nigerian governments have been making a lot of efforts to improve the educational system by providing scholarships to Nigerian citizens overseas, many of the young people who benefit from such scholarships do not return at the end of their studies. A number of them prefer to remain in their host countries because of the better working conditions and better environment. However, as can be seen from the foregoing, medical brain drain has had a negative impact on the health sector. The remaining staff had excessive workloads and this led to low morale. It meant dealing with many patients, who in turn had to wait for long hours in order to be attended to. Migration swept away most of the experienced professionals in the educational and health sectors, and this has negatively affected the quality of work in Nigeria. The drain has also caused inequity in terms of access to health delivery services. A major constraint in the health sector in Nigeria has always been the shortage of medical personnel. Mbanefoh (2008) noted that the federal government admits that manpower remains the most important resource requirement for the health sector, as well as its greatest constraint. Nigeria needs to recognize that migration cannot be simply prevented, as it is influenced by a variety of factors such as living conditions,

access to education, politics, wages, working conditions, and knowledge of opportunities. In view of the emigration of highly-skilled professionals, the question is how does the sustained depletion of healthcare and educational professionals through brain drain affect sustainable development in Nigeria? What measures has the Nigerian government adopted to stem the tide of brain drain in the education and health sectors in Nigeria? Based on the above premise, the following are the objectives of the study;

- (i) Determine how the long-term depletion of healthcare and education professionals due to brain drain affects long-term development.
- (ii) Examine the measures taken by the Nigerian government to halt the country's brain drain.

Conceptual clarifications

Brain Drain

The term "Brain Drain" was coined by the British Royal Society to describe the outflow of scientists and technicians to the United States and Canada in the 1950s and early 1960s (Carrington, 1999). Peterson (2007) asserts that the menace of human capital movement seems to be an issue of global concern to many scholars, because its occurrence defies ideological affiliation worldwide as well as their level of development. While Idahosa & Akpomera (2012) and Onyeke & Adieme (2014) assert that brain drain, also known as capital flight, simply connotes "large-scale emigration of individuals with technical skills or knowledge" to other countries for better conditions of service and an improved standard of living. It is generally agreed that the migration of highly educated and skilled workers across national and internal borders has adverse economic, social, and cultural implications for both the countries of origin and destination (World Bank 2009).

Sustainable development

Sustainable development refers to the mode of human development in which resources used aim to meet human needs while ensuring the sustainability of natural systems and the environment so that these needs can be met not only in the present, but also for generations to come. Akintoye and Opeyemi (2014) posit that through the development process, the interactions between social, economic, and institutional processes must be continually sustained to meet increasing future demands in terms of population growth and continuous use of natural, human, and material resources. By implication, sustainability is considered as a paradigm of vision for the future in which economic, social and environmental considerations work in a balanced way to develop and improve the quality of life (Balan & Dragolea, 2013, Omotayo, 2008, Mckeown et al, 2002). The brain drain phenomenon that characterizes slow development has to be tackled in a manner that guarantees sustainable development in order to ensure improved standards in Nigeria's health and education sectors.

The Brundtland Commission's 1984 report, which was cited in Ajibade (2012), defines sustainable development as: "development that meets the needs of the present without

compromising the ability of future generations to meet their own needs". This definition has become the most generally accepted and often quoted definition of sustainable development. It has also been seen as the standard and most succinct definition of sustainable development. It views sustainable development as having a major focus on inter-generational equity.

The theoretical framework

The theoretical framework for this study is the push pull theory of migration. The push-pull theory is inspired by Ravenstein, who was a geographer during the 19th century. As Ravenstein (1885), he argues, migration is influenced by the push and pull process, in which, on the one hand, unfavorable situations in one place such as governmental oppression, economic hardship, etc "Push" people out, and on the other hand, favorable situations in an external place that "Pull" them in (Vassilopoulou, et al, 2014). **The fundamental assumptions** are: (1) that the more disadvantaged a place is, the more likely it will produce migration, and that, given inequalities, there will be migration. (2) Migration can be explained as a function of the economic performance of receiving and sending nations. (3) The common push factors are low productivity, unemployment, and underdevelopment, as well as poor economic conditions, a lack of opportunities for advancement, natural resource depletion, and natural disasters.(4) The pull factors are factors which attract migrants to an area. An area's draw factors include better employment opportunities, higher wages, facilities, better working conditions, and appealing amenities.

Application of the theory

Socioeconomic conditions have been a potent push factor in the growing phenomenon of Nigeria's brain drain. The pull factors, on the other hand, are the prosperity elements in the rich countries, which are simply nicknamed "greener pastures" by African professionals who migrate there. The availability of skilled and knowledgeable people is, at any time, the hinge in any sector's development of the economy. The considerable outflow of these human resources undoubtedly lowers the productivity and progress pace of society. This implies that the reason for the imbalance in the development of the Nigerian economy is solvable if the right actions are taken to control migration.

Hypothesis:

- The sustained depletion of Nigeria's health professionals through brain drain leads to inefficient health care delivery.
- Enhanced remuneration and a good working environment will help to ameliorate the effects of brain drain for improved sustainable development.

Methods of data collection

The basic method of generating data for this study was through secondary sources of data collection, which included books, journals, government documentation, newspapers, conference proceedings, monographs, and internet materials.

Hypotheses I: How does the sustained depletion of the stock of Nigeria's health and academic professionals through brain drain lead to inefficient health care delivery?

The Nigeria health sector is one of the major sectors adversely affected by the mass emigration of health professionals. The Nigerian health sector has lost most of the relevant crop of qualified health personnel to drive health care delivery to the teeming population of the country. The reason is that many qualified health personnel have emigrated to other countries, such as Europe, the United States of Africa, Canada, South Africa, and other Asian countries for greener pastures. As a matter of fact, Nigeria is one of the major health-staff exporting countries in Africa. In his view, Uneke et al (2008), between April 2000 and March 2001, about 347 Nigerian nurses emigrated legally to Britain. In about the same period, between April 2001 and April 2002, 432 nurses emigrated to Britain. While Nigeria is denied the vital services of its health professionals, the West and the oil-rich states of the Middle East are the prime beneficiaries (Mbanefoh 2007). As the health sector is an integral part of Nigerian society and, therefore, subject to its vagaries, the depletion of its human resources is induced by the same set of push, pull, and suction factors generated internally and internationally. The effect of the depletion of human resources in the health sector is noticeable in the increasing inability of the country to subdue its numerous health challenges, which contribute to reduced life expectancy.

Nigeria has a population of over 140 million people, with a population growth rate of 2.8 to 3.2 percent in 2007. According to the Central Bank of Nigeria's Annual Report (2007), more than half of Nigerians are classified as poor, with the official poverty rate set at 54.0 percent. What the interpretation of these statistics immediately portrays is that the unfortunate economic status of over half of Nigeria's population endangers their access to adequate health care services. According to the WHO recommendation of 20 physicians per 100,000 people or one physician to 5000 people, it has been impossible for Nigeria, in the face of the mass exodus of its medical personnel, to meet this ratio of medical well-being. Before the advent of medical brain drain, the doctor-population ratio was a far cry from the WHO ideal.

Mbanefoh (2007) informs that, as at 1979, Nigeria had a doctor-to-population ratio of 1:24,607. Nigeria would have surpassed the WHO threshold if not for brain drain. The 2007 doctor/population ratio was 1:10,000 going by the number of physicians in good standing, that is, those who renewed their annual practicing license. Table 1 shows the global critical shortages of doctors, nurses, and midwives as at 2006. Africa was the hardest hit, requiring a 139 percent increase in current stock to reach acceptable limits. The trend since then has deteriorated, with a greater increase in the demand for African physicians and a decaying infrastructure for training them. Out of 46 African countries

evaluated, 36 of them, including Nigeria, had critical shortages requiring urgent attention. Indeed, globally, Africa is the worst-hit, as it accounted for 36 out of 57 countries designated by the WHO as suffering from a critical shortage of health professionals.

Table 1: Estimated Critical Shortages of Doctors, Nurses and Midwives, (By WHO Region) (2006)

WHO Region	Number Countries		of In countries with shortages		
	Total	With shortages	Total stock	Estimated shortages	Percentages required increased
African	46	35	590,198	817,992	139
Americas	35	5	93,603	37,886	40
Southeast Asia	11	6	2,332,054	1,164,001	50
Europe	52	0	NA	NA	NA
Eastern Mediterranean	21	7	312,613	306,031	98
Western Pacific	27	3	27,260	32,560	119
World	197	57	3,355,728	2,358,470	70

NA: Not applicable; Source: World Health Report 2005 cited in Nwozor 2011

Nigeria's doctor-population ought to have met the WHO standard by 2010, or at least be close to it considering the enormous resources Nigeria has earned from oil, but this is not the case. Nigeria is still very far from meeting the WHO doctor-population benchmark. This is due to the brain drain that eats up medical professionals, as well as the rate of population growth, which ranged between 2.8 and 3.2 percent, with very high migratory flows making it impossible to close the large gap in the ratio. As Mbanefoh (2007) opined, medical professionals, particularly doctors, have remained a scarce commodity in the health systems in Africa. Filling vacancies created by the emigration of experienced doctors tends to be difficult due to their increased demand by developed nations and rich Arab countries. The scarcity of health professionals in Nigeria and Africa and the wide gap in the doctor-population ratio are not because these professionals are not produced or are inadequately produced, but because they are readily absorbed by the developed

countries. The primary reason is the nation's health sector's state-centered neglect of manpower formation. Since the 1980s, developed countries have implemented various quality-selective immigration policies. " These policies not only enabled them to substantially relax the quotas for highly skilled personnel but also attract and retain targeted skilled professionals for national development (Docquier and Rapoport 2007, Nwozor 2010).

According to WHO's 2006 classification of countries with critical human resource shortages, Nigeria was included among the 57 countries so designated (WHO Report 2006). The sub-saharan Africa was adversely affected by the shortage as 36 of the countries in the region made the list. WHO estimated that for all these countries designated as suffering from human resource shortages in their healthcare delivery systems to reach the target levels of health worker availability, an additional 2.4 million professionals would be required globally (WHO Report 2006).

The reason for the shortage in the levels of health worker availability in Nigeria is not necessarily a matter of institutional incapacity, as there has been consistency in the admission of prospective students into health teaching institutions, but it is, however, a product of brain drain. Using the University College Hospital Ibadan (UCHI) as a case study to support the debilitating and rippling effect of brain drain on Nigeria's health sector, Mbanefoh (2007) records that between the early 1980s and 1987, the UCHI lost almost 40% of its senior doctors, with the Department of Surgery adversely affected. For example, out of 23 lecturers in 1984, 18 of them had left by 1989, leaving only five lecturers to man the department. This is a clear case of brain drain in the health sector. Consequently, there was a drop from 274 in 1984 to 124 in 1989. According to Mason (2009), poor people who can not afford overseas treatment for their patients are dying every day of sickness and diseases due to insufficient health workers in the country. Healthcare professionals contribute to health promotion, disease prevention, diagnosis, treatment and rehabilitation. Thus, the emigration of such professionals aggravates the human resources shortages in national district health systems and reduces the capability of such systems to perform their core functions. The ripple effect of this seeming mass exodus of health professionals has continued to slow down advances in healthcare delivery in Nigeria. From the foregoing, we can see that the sustained depletion of the stock of Nigeria's health professionals through brain drain has led to inefficient health care delivery.

There has been a constant movement of educational professionals, particularly young lecturers who travel for further studies but do not return to Nigeria to continue their careers. Many of these academics prefer to work abroad or with multinationals where they can receive better remuneration.

The measures adopted by the Nigerian government to curb brain drain are

In order to address the shortfalls arising from government expenditure on health, a new insurance policy was introduced under the auspices of the National Health Insurance Scheme (NHIS) Act in 1999. The health insurance scheme was a strategy to introduce a

new source of health care financing that would reduce the cost and the burden of health care of individuals, as well as improve the quality, availability and affordability of health services in Nigeria. It includes both government and private-sector employees, as well as the informal sector. Although the NHIS has not covered all sectors of the economy, it promises to be a veritable source of health financing and it is estimated that 5.3 million Nigerians are already benefiting from it (Muanga, 2010). Health Insurance Expenditure (HIE) grew from about N15.66 billion in 2003 to N18.79 billion in 2005. In 2009, health insurance expenditure increased by 14% to N21.34 billion (FMOH 2009, Nwozor, 2011). The National Health Insurance scheme has contributed immensely to improving health standards in Nigeria and still plans to expand its reach. It has positive prospects. But its evaluation so far shows that despite its contributions, which eased a considerable burden off the shoulders of the poor and the middle class, the health indicators are yet to display its impact.

In the educational sector, the government has provided huge sums of money to tertiary institutions through the Tertiary Education Trust Fund (TETFUND). Through this fund, the award of scholarships to Nigerian youths to study abroad in medicine, engineering, and technology is a way of reducing brain drain, although a good number of these youths refuse to return to Nigeria after their studies due to better conditions of service and a better working environment. Some of these youths were granted state or federal government scholarships to study abroad.

Nigerians at home have also received government scholarships to study in our indigenous tertiary institutions and have improved themselves, both in education and health institutions. This has improved service delivery in our healthcare and educational delivery. A huge amount of money has been spent on procuring books and journals in our tertiary institutions and heavy equipment for our laboratories, even though they are still inadequate.

In recent times, the Nigerian government has given a lot of attention to alternative sources of energy, otherwise known as renewable energy sources, to assist the existing energy resources that have been very epileptic. This was also to improve the energy sources that are available for educational research and development in Nigeria. These alternative energy sources have been utilized to power computers, refrigerators, lighting, and other facilities needed to create a better working environment for Nigerian workers. The federal government has also, through public-private partnerships, been able to provide housing facilities for some government workers. These facilities have provided good accommodation for some workers and thus have reduced the migration of many workers, especially the middle-income groups, to other countries.

Information, communication and technology (ICT) in Nigeria has also received a great boost. There has been a lot of improvement in ICT in the last two decades. Internet facilities and other information devices have been developed, and this has made transmission and access to information and communication very easy, even in the health and education sectors. Modern technology has been introduced in both the education and health sectors. This has made teaching and learning less cumbersome. For instance,

computer-based tests (CBT) are used to handle examinations involving a large number of candidates, such as the Joint Admissions and Matriculations Board (JAMB) and university first-year examinations.

The introduction of information technology through the world wide web has greatly improved accessibility to information and communication in our health and educational institutions. Consequently, those in education and health-related fields, as well as those in technology, access information through the internet. This has reduced the stress of going to search for materials in the libraries (ITU, 2010, Enibe, 2013).

A healthy-looking environment plays a key role in maintaining our economic prosperity and attracting and retaining people to live and work in Nigeria. This will ensure sustainable development in Nigeria.

The Nigerian government has provided enhanced welfare packages to Nigerian workers, especially in the health and education institutions. Under the chairmanship of Prof. Jega, who later became the Chairman of the Independent National Electoral Commission (INEC) in 2015, after a long period of industrial dispute by the Academic Staff Union of Nigerian Universities (ASUU), the salaries of university lecturers and workers were reviewed and enhanced. Also, during the regime of President Obasanjo, the salaries of Federal Civil Servants and those in the public service were also reviewed and good welfare packages were given to Nigerian workers. In addition, good welfare packages were given to civil servants during President Goodluck Jonathan's administration. If these measures are sustained, sustainable development could be achieved and the brain drain reduced to the barest minimum.

Summary:

Brain drain and sustainable development in Nigeria have been examined. One of the major concerns about brain drain is the erosion of highly skilled professionals, especially in the health and education sectors of Nigeria. Push-pull theory was used as the theoretical framework for the work. In this regard, the findings of the study reveal that the sustained depletion of the stock of Nigeria's health and educational professionals through brain drain necessarily leads to inefficient health care delivery in Nigeria. Although it has also contributed to the lowering of the standard of education in the country, the crop of academics that are available have been doing their best to improve the standard of education in Nigeria. It was recommended, among other things, that enhanced remuneration and a good working environment would help to reduce the level of brain drain and hence enhance sustainable development.

Recommendations

While it is not possible to prevent people from migrating to developed countries for better prospects in this era of globalization, the adverse impact of such movements on economic development demands urgent attention. Based on the discussions and findings of the study, the following recommendations are made;

The Nigerian government should provide 26% of the budget to the educational sector as required by the United Nations Educational, Scientific, and Cultural Organization (UNESCO).

In our educational sector, this will go a long way in reducing the exodus of our young graduates in the health and education sector in order to ensure sustainable development in these sectors. Also, the National Health Insurance Scheme (NHIS) should include the private sector and not just public sectors.

The government needs to increase the number of scholarships given to undergraduates and graduate students to assist more people to study in Nigeria or overseas. In addition, more stringent measures should be adopted by the government to ensure that those sponsored by the government to study overseas return to Nigeria to work and teach so that the younger generation will benefit from their wealth of knowledge. In this way, sustainable development will be achieved.

The government should on a regular basis give some welfare packages to our health and education professionals to help them cushion the effects of the harsh economic situation on them and this will help reduce the high level of brain drain of our skilled professionals and enhance sustainable development of the workers. If the professionals in the education and health sectors were well remunerated, the brain drain would be greatly reduced.

The development of infrastructure such as good roads, good sources of water and electricity (power) supply, with good accommodation, would greatly reduce the rate of brain drain.

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