

The Brain Drain, Skilled Labour Migration and Its Impact on Africa's Development, 1990s-2000s

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Abstract

The major thrust of this paper is to interrogate the impact of the brain drain and skilled labour migration on Africa's socio-economic development since the 1990s. Although, prior to the 1990s, a number of Africans had voluntarily migrated and settled in the overseas, most especially in the western hemisphere, the phenomenon became unprecedented in the period between the 1990s and 2000s. This development was facilitated by a combination of factors, which could be summed up as push and pull factors of international migration. While low living standards, political persecution, insecurity and lack of opportunities to utilise skills among others are the main push factors, higher wages, job opportunities, relatively good working conditions, freedom from political oppression, relaxation of immigration policies and the phenomenon of new globalisation constitute the main pull factors. The main destinations of these "economic migrants" are the United States, United Kingdom, Canada and Europe. Drastic reduction in African scholars, poor delivery of basic healthcare and health programmes, lack of efficient utilisation of external assistance and low level of institutional capacity building are the main effects of the loss of highly-skilled African migrants on Africa's development.

The paper argues that it is practically impossible to achieve a meaningful development in a society that loses its “best brain” to “forced international migration”. It, therefore, submits that African leaders must be alive to the promotion of good governance in order to save the fragility of African states from collapsing. The methodological approach adopted in this paper is historical, analytical and descriptive, utilising materials from the secondary sources.

Introduction

There are existing studies on the movement of population from one geographical area to another in the course of human and material development. This movement can either be voluntary or involuntary. In this paper, our main focus is the voluntary international migration. Historically, migration is a way of life in Africa. Over the generations, African peoples have migrated in response to security, demographic, economic, political and related factors: population pressure, environmental disasters, poor economic conditions and so on.¹ As argued by Curtin, Bruijn and International Organization for Migration (IOM), Africa has long been described as an immensely “mobile continent”.²

Generally, international labour migration is not restricted to Africa. It is a global phenomenon, which became unprecedented between the 1990s and 2000s as a result of globalisation. International migration or cross-border migration remains a major global phenomenon that has continued to rise steadily in recent years, with migrants now accounting for over 3 percent of the global population.³ The number of international migrants, comprising both economic and humanitarian migrants increased threefold since 1960, reaching 232 million in 2013, of which about one quarter migrated over the past two decades.⁴ For instance, according to the 2002 report of the United Nations, by the beginning of the 21st century, the total number of persons globally living in countries other than their own was 180 million.⁵ From 1970 to 2005, the stock of international migrants in the world increased from nearly 82 million to just over 190 million, according to United Nations (UN) estimates.⁶ Recent international migration patterns have been predominantly characterized by South-North flows. While migration between emerging market and developing countries (South-South) accounts for a large part of the international migrant stock, recent trends have been driven mainly by migrants moving from emerging and low-income developing countries (Africa in particular) to advanced economies (with Europe and North America being the main recipient regions) (South-North).⁷

The major continent that has continued to record high rates of skilled labour migration during this period of study is Africa. Since the post colonial period, the movement of African immigrants into the Western and Eastern hemispheres is hinged on push and pull factors. Donald argues that four major factors account for the patterns in African migration during this phase. These factors are globalization and integration of the world economy; economic and political development failures in Africa; immigration and refugee policies in Europe and the United States; and colonial background.⁸

Importantly, since the 1990s the major centres of attraction especially for African immigrants are North America particularly the United States of America and Canada) and Europe (especially United the Kingdom); New Zealand, Singapore, Saudi Arabia, Qatar, the United Arab Emirate, Asian and Middle East countries.⁹ In fact, according to Akanmu, the streams gathered strength and became a flood in the 1990s.¹⁰ This was why according to the 2005 World Migration Report, Africa was described as “the continent with the most mobile populations in the world” (IOM 2005, 33). This development has resulted in the general view that high emigration from Africa has led to brain drain and brain waste. Undoubtedly, the migration of highly trained professionals out of Africa leaves many countries in the continent short of the skills needed to meet the challenges of socio-economic and political development.

It is against this background that this paper intends to interrogate the brain drain, skilled labour migration and its impact on Africa’s development between the 1990s and 2000s. The paper is divided into five sections. Section one introduces the discussion and the methodology adopted for the study. The second part focuses on conceptual clarifications / theoretical framework for the study. Section three centres on historical trajectory of contemporary international migration of skilled African immigrants into the Diaspora since the 1990s. The fourth section discusses the impact of the loss of skilled African immigrants on Africa’s development. The last section is the conclusion. The methodological approach is historical, thematic and analytical. The major source of material used in this paper is secondary.

Conceptual Clarifications/Theoretical Framework for the Study

Brain Drain: The Brain Drain, otherwise known as human capital flight, has been described as a contentious subject, which has been challenged in recent years. Today, some scholars, rather than using the word “Brain Drain” prefers more politically neutral terms known as “Brain Exchange” or “Brain Circulation”. However, in this paper, we prefer to use the word “Brain Drain” because of its negative effect on Africa’s development, which is our main argument. While Oyelere argues that the etymology of the word “brain drain” emerged in the 1950s and was triggered by the massive migration of British scholars to the United States¹¹, Gibson and McKenzie cited by Boyo posit that concept of “brain drain” was first used by the British Royal Society to describe a situation in the 1950s, where scientists, doctors, engineers and other skilled individuals were migrating from Europe to the United States and Canada in search of employment.¹² We submit that the concept of brain drain is a post-Second World War development and has been defined by scholars from varying perspectives. According to Oyelere, brain drain is said to occur when a country becomes short of skills as people with such expertise emigrate. It can be described as the loss by countries of essential and needed professionals via emigration to other countries. Skilled workers included in this class are scientists, doctors, engineers, academics, nurses, managers, and other professionals who have received a tertiary education.¹³

Olumide and Wilfred see brain drain happening when skilled professionals from a country (mostly poor countries) migrate into other countries (mostly richer countries) to practice their profession and benefit these countries economically.¹⁴ Brain drain also means human capital flight. In all, brain drain is a migration of professionals from one country to another, mainly for higher salaries and better living conditions, thus resulting in the economic development of the host/receiving countries, but to the detriment of the home countries.

Skilled Labour: Basically, there are two kinds of labour, namely skilled and unskilled labour. While unskilled labour makes use of their physical efforts in productive activities, skilled labour makes use of their mental effort. Generally, a skilled labourer is someone with tertiary education. That is, a person who has undergone a relatively long and specialised training. Importantly, education and training are the basic qualities that distinguished a skilled labourer from unskilled labourer. These two qualities are the determining factors that facilitate easy movement of most African skilled labour from the continent to the developed countries.

Migration: Migration refers to the movement of people from one geographical location to another, either on a temporary or permanent basis.¹⁵ It also means the permanent movement of individual or group over a distance changing residence and crossing a specified boundary.¹⁶ There are two main categories of migration, namely, internal and external or international. While internal migration involves movement within the country, external migration refers to the movement from one country to another or movement across frontiers. Here, our main focus is international or external migration of economic migrants, who are mainly professionals in different fields of study.

Theoretical Framework for the study: There are several theories of international migration. These international migration theories present two main perspectives, economic and non-economic, as the determinants of migration. According to the economic perspective, individual migrants are viewed as rationally optimising the costs and benefits of their decision to migrate. Economists generally regard the decision to migrate as one which invariably leads migrants from low-income areas with job prospects to high-income areas where they can improve their economic standing by employment in the formal salary sector.¹⁷ The non-economic perspective consists of other social scientists like geographers, sociologists and anthropologists, among others and thus pose that migration decision consists of some non-economic considerations such as the choice of destination, means of transport, presence of relatives, friends and/ or co-villagers at destination, ethnic compatibility and residual environmental factors at both places of origin and destination.¹⁸ These two perspectives of migration are represented in various theories of international migration among which are Ravenstein's Laws of Migration; Everett Lee's push and pull" theory of migration; Charles Tilly's three determinants of migration; segmented labour market; and world-systems theory.¹⁹ Of these theories, the paper adopts Everett Lee's push and pull theory. This is because the Push-Pull theory remains a core theoretical approach widely used in a discourse on the brain drain and international labour migration in general.

The theory is constructed around some fundamental factors (economic, social and political hardships in the sending regions or push factors) and factors of attraction (comparative economic and social advantages in the receiving regions, also known as pull factors) as causal variables, which determine the size and direction of migration.²⁰

Development: Development is a multi-dimensional concept that has been viewed by economists and other social scientists from different perspectives. For example, Denis Goilet defines development as “a multi-dimensional process involving the re-organisation and re-orientation of the entire economic and social system”.²¹ Todaro sees development as “a multi-dimensional process involving major changes in social structures, popular attitudes and national institutions, as well as the acceleration of economic growth, the reduction of inequality and the eradication of poverty.”²² Sen argues that development refers to as “the removal of major sources of unfreedom: poverty as well as tyranny, poor economic opportunities as well as systematic social deprivation, neglect of public facilities as well as intolerance or overactivity of repressive states”.²³ From these perspectives, one can explain that development involves a whole gamut of changes, which may be social, economic and political systems.

Historicising the Contemporary International Migration of Skilled African Immigrants into Western Hemisphere since the 1990s: An Overview

Generally, voluntary international labour migration or inter-continental labour migration is now a new phenomenon. Modern voluntary international movement of people on a massive scale could be categorised into two major phases, namely the period between 1850 and 1914, and the post-Second World War era. Existing literature reveals that the first era of mass voluntary international migration occurred between 1850 and 1914.²⁴ This period could be described as the earlier era of globalisation. It was the movement of the Europeans to the New World (now known as the Americas). During this period, majority of the European migrants were unskilled labour.²⁵ By the turn of the 20th century, over one million people a year were drawn to the New World.²⁶ Although there were evidences of international migration in other parts of the world during this period, such as East Europeans moving to Western Europe migration to Southern Africa from Europe (first by the Dutch, then by the British), South Asia and East Africa; and Asians, particularly from India, China and Japan migrating most often as contract labourers to East Africa, South East Asia, the Pacific Islands, the Caribbean region and the West Coast of North America, the movements were not as large as that of the Europeans to the New World.²⁷ Statistically, according to the estimate of the International Migration and the Global Economic Order, about ten percent of the world's population migrated during this period.²⁸ The second era of mass voluntary movement of international migrants, which began since the end of the Second World War is regarded as the new wave of international migration or contemporary international migration.

The period marked the genesis of mass movement of skilled labour, mostly from Europe to the United States. According to Kaba, after the Second World War, it was estimated that about 100,000 highly skilled Europeans migrated to the United States.²⁹ This movement, which initially was North-North movement, later became North-South movement. This contemporary international migration has not only altered the labour supply (which involved both skilled and unskilled labour) and the demographic characteristics of both the sending and the receiving countries, but also influenced economic growth, patterns of trade, income distribution and the distribution of political power within and between countries. Africans were actively involved in this new migration stream. The direction of their movement during this phase was toward the Western hemisphere.

Fundamentally, the emigration of Africans into the Western hemisphere lies in two historically distinct movements, that is, involuntary, also known as old Diaspora, and voluntary also called new Diaspora. While the involuntary movement began during the Atlantic Slave trade in the 15th century, the voluntary movement started since the post-Second World War. However, the two main historical movements were facilitated by different factors. Our main focus in this paper is the voluntary movement, which began since 1945. Following the end of World War II, countries of Europe in particular again became attractive destinations for prospective African immigrants (both skilled and unskilled). They opened their doors to African immigrants, by relaxing their immigration policies, in order to help them rebuild their economies. Although there are conflicting figures on the total number of African migrants that moved into the Western hemisphere during this period, evidences showed that a substantial number of them migrated and settled in places like the United States of America, Canada, the United Kingdom and other parts of Europe in the period up to 1990. With respect to skilled labour migration from Africa, existing studies on African Diaspora reveal that the brain drain from the African continent became the subject of attention between 1960 and 1965.³⁰ Both El-Khawas and Fadayomi in their separate works argue about 27,000 educated Africans migrated to the West.³¹ This international African migration continued to take different dimensions in the subsequent decades. For instance, Fadayomi explains that the figure of skilled Africans increased to 40,000 in the years between 1975 and 1985.³² While Chacha posits that between 1986 and 1990 about 60,000 middle and high-skilled Africans migrated from the continent to more developed countries in the West³³, Aredo and Zelalem submit that Africa lost 60,000 professionals between 1985 and 1990.³⁴ Also, Nunn specifically reveals that between 1985 and 1990, 60,000 doctors, nurses, engineers, academics and other highly skilled Africans migrated out of the continent in search of better standards of living.³⁵ The outflow of skilled manpower from Africa between 1960 and 1975 tended more to the United States because of the need for skilled human capital in the country.³⁶ It was further revealed that during this period, higher-educated Africans migrated at the rate of about 1,800 a year, of which the top five sending countries to the United States from Africa came from South of the Sahara desert among which were Kenya, Ghana and Nigeria.³⁷ As a corollary to the above statistics, the International Organization for Migration and the Economic Commission for Africa gave the estimates of average annual rate of total skilled Africans that migrated to industrialized countries between 1960 and 1989 as follows:

Period	Average Annual Rate	Total Number
1960-1974	1,800	27,000
1975-1984	4,000	40,000
1985-1989	12,000	60,000
Total	17,800	127,800

Source: IOM and ECA reports, 1990

However, from the 1990s international migration generally became unprecedented. For instance, it was reported that since 1990, the number of international migrants (voluntary and involuntary) increased by 65% (53 million) in the global North, and by 34% (24 million) in the global South.³⁸ Although the international migration trend grew in the 1990s, since the emergence of the new millennium in 2000 it was rapid. From the available statistics, the number of international migrants worldwide continued to grow rapidly over the past fifteen years, reaching 244 million in 2015, up from 222 million in 2010, 191 million in 2005 and 173 million in 2000. While between 2000 and 2005, the international migrant stock grew by an average of 2 per cent per year, between 2005 and 2010, the annual growth rate accelerated, reaching 3 per cent. However, it fell to around 1.9 per cent per year during the period 2010-2015.³⁹ Meanwhile, the high-income countries (developed countries) host more than two thirds of all international migrants. For instance, as of 2015, 71 per cent of all international migrants worldwide, which was about 173 million, lived in high-income countries. Of these, 124 million of the migrants were hosted in the United States, Canada, the United Kingdom, and Europe.⁴⁰ The high increase in international migration especially since the 1990s was caused by several factors, which were both push and pull. With respect to Africa, while the push factors comprised the collapse of social, political, economic, and educational structures in different African countries, the pull factors involved higher wages and job opportunities, relaxation of immigration policies and the phenomenon of new globalisation in the West. Different categories of Africans migrated to the West during this period. Our main concern here is the skilled African immigrants of different professions. The main destinations of this category of economic migrants were the United States, the United Kingdom, Canada and Europe.

Since the 1990s, the skilled Africans constituted the highest number of immigrants that voluntarily migrated to the western hemisphere. These skilled labour Africans being interrogated in this paper, such as academics, doctors, lawyers, engineers, and nurses among others, who left government establishments and private sectors, were African-trained human capital. The paper recognises the fact that there were some Africans who left the continent as either semi-skilled or unskilled migrants, but who later became skilled and eventually chose to remain abroad. However, this category of skilled Africans is not captured in this study. According to IOM, Africa has not only already lost one third of its human capital, but also has continued to lose its skilled personnel at an increasing rate, with an estimated 20,000 doctors, university lecturers, engineers and other professionals leaving the continent annually since 1990.⁴¹ This could be corroborated with the argument of Tebeje and Onsando, who posit that about 20,000 African professionals each year since 1990 were leaving the continent.⁴²

For instance, the United States became one of the main destinations of skilled African migrants. According to data from the World Bank's Global Skilled Migration Database, the United States benefits from disproportionately high skilled African migration. For example, in 2000, the United States accounted for 37 percent of African skilled migrants.⁴³ Between 2000 and 2010, the United States was the destination for 59 percent of Nigeria's high skilled immigrants, along with 47 percent of those from Ghana and 29 percent from Kenya.⁴⁴ Also, in Britain, in 2005, it was reported that over 12,000 doctors and 16,000 nurses had been recruited to the National Health Service from African countries, while a World Bank report estimated that there are over 70,000 African migrants to Europe and North America every year.⁴⁵ For instance, in the span of three years (1999-2002), the University of South Africa lost a staggering total of 100,000 professionals including doctors, engineers, scientists, academics and accountants.⁴⁶ Also, it was estimated that 15% of all professionals who left Zimbabwe since 2000 to the United Kingdom, the United States, Australia and New Zealand were skilled workers such as doctors, nurses, accountants and engineers.⁴⁷ The brain drain in the country, which assumed political connotations, forced President Robert Mugabe to accuse Britain, her former colonial ruler, for "stealing" medical doctors, nurses, and pharmacists from Zimbabwe.⁴⁸

Generally, skilled Africans were moved into western countries at alarming rates during this period of study. However, there was variation in the number of skilled migrants from different parts of Africa. While the emigration of skilled Africans was more acute in some African countries (such as Nigeria, Ghana, Kenya and South Africa), in the others it was minimal (such as Zimbabwe, Uganda and Ethiopia). During this period, North America (especially the USA and Canada), the United Kingdom and Europe attracted the largest skilled African immigrants. While low living standards, political persecution, frustration, lack of opportunities to utilise skills (unemployment and lack of job satisfaction) among others were the main push factors that forced most skilled Africans to migrate to these areas, higher wages, job opportunities, relatively good working conditions, relaxation of immigration policies and the phenomenon of new globalisation constitute the main pull factors. For instance, the mass emigration of African academics to the Western hemisphere in the 1990s was as a result of fear of political persecution and frustration. Evidences from the existing studies revealed that in the 1990s, the majority of African countries were ruled by military dictators, whose harsh economic policies were challenged by the academics and other intellectuals, and thus forced them to flee their countries.⁴⁹ For example, the introduction of a Structural Adjustment Programme by General Ibrahim Babangida in 1986 in Nigeria received serious criticism from the academic community. This development led to the emigration of some senior academics (between Senior Lecturer and Professors) from some universities like University of Ibadan and Obafemi Awolowo University, Ile-Ife. Onsando argues that according to the estimates of the Presidential Committee on Brain Drain set up in 1988 by the Babangida administration, between 1986 and 1990, Nigeria lost over 10,000 academics from tertiary education institutions alone.⁵⁰

Tettey posits that these Nigerian academics, who were exiled in the United States, fled the country for fear of persecution.⁵¹ According to a 2007 report of the United Nations Educational, Scientific, and Cultural Organization (UNESCO) cited by Oyelere and Onsando here were currently over 300,000 highly qualified Africans in the Diaspora, 30,000 of who have PhDs.⁵²

Lack of opportunities to utilise skills and unemployment equally constitute the exodus of the educated class from the continent. There is no doubting the fact that youth unemployment had been at alarming rates since the beginning of the new millennium. For example, while in South Africa youth unemployment had risen to 48% in 2013,⁵³ in Nigeria, according to the Nigerian National Bureau of Statistics, “the national unemployment rate increased from 19.7 per cent in 2009, to 21.1 per cent in 2010, and to 23.9 percent in 2011.⁵⁴ This problem mostly affected African trained doctors, nurses and engineers. In fact, for those who managed to find employment, their wages were significantly lower than what they would earn abroad. For instance, according to Adepoju, while a trained nurse in Uganda earns \$US38 per month and a doctor US\$67 per month, their colleagues in the US could earn about US\$3,000 and US\$10,000 respectively”.⁵⁵ Also, Kaba observes that a doctor in the UK gets paid over a dozen times more than what a Ghanaian doctor would make (US\$ 200,000 versus US\$14,600).⁵⁶ This was why Akanmu concludes that the high incidence of a new wave of skilled migrant labourers from Africa to Western hemisphere was because those countries could pay for and utilize their competitive skills.⁵⁷

Fundamentally, the relaxation of immigration policies and the phenomenon of new globalisation constitute the main pull factors that facilitated the emigration of skilled Africans to the Western hemisphere. These factors coupled with good working conditions facilitated the emigration of skilled Africans to developed countries. In fact, the period between 1990 and 2000 witnessed high influx of skilled Africans to the United States, Canada, the United Kingdom and Europe. For instance, between 1990 and 2000, about 13% of African people of south of the Sahara who migrated to Organization for Economic Cooperation and Development (OECD) nations were skilled workers.⁵⁸ The United States, Canada and the United Kingdom were good examples of developed countries that operated differentiated immigration policies mainly designed to attract some skilled workers. For example, the UK has for several years operated differentiated immigration policies designed to attract some skilled labour. For instance, in terms of the general scale of migration to work in the UK, Home Office figures showed that in 2002 119,000 people entered the UK on Work Permits.⁵⁹ Also, during the same year, there were roughly 34,000 foreign nationals (Africans inclusive) working as academics in UK higher education. This population constituted about 23% of the total number of academics in the UK tertiary institutions.⁶⁰ However, between 1995 and 1996, the proportion of foreign academics working in the UK higher education system was just over 21%.⁶¹

The Impact of the Brain Drain on Africa's Development: A Critical Assessment

Generally, there are two main perspectives among scholars on the impact of the brain drain on Africa's development. While the first perspective comprises scholars who believe that the brain drain is actually beneficial (supporters of brain drain) to both the receiving and sending countries, the second perspective consists of those who posit that aside the fact that the brain drain has negative consequences, it has perpetuated inequality between the countries in the Global South and the Global North (opponents of the brain drain). Although a critical assessment of the impact of the brain drain on Africa's development between the 1990s and 2000s revealed that it was a mixed blessing, that is, it was both positive and negative however the negative impact outweighed the positive. These two sides are interrogated in this paper. Meanwhile, we will begin our discussion on the negative impact of the brain drain.

There is no doubting the fact that it is practically impossible to achieve a meaningful and sustainable development in a society that loses its "best brain" to "forced international labour migration". This is because the loss of skilled labour is of immense importance for development and development potentials. This could be corroborated with some observations. For instance, the United Nations Economic Commission for Africa (UNECA) posits that the emigration of African professionals to the West is one of the greatest obstacles to Africa's development⁶²; Barka says that "African governments have a great responsibility to ensure that brains remain in the continent; otherwise, in 25 years' time, Africa will be empty of brains."⁶³ Also, Ofori-Sarpong argues that "[by] failing to offer greener pastures for its own intelligentsia, [Africa] is committing suicide."⁶⁴ This shows that while the loss of academics undermines the ability of university education to function effectively, the loss of medical doctors, nurses and other health professional impairs efforts to deliver even basic healthcare and public health programmes; and the loss of other skilled professionals acts as a barrier to institutional capacity building, the efficient utilisation of external assistance and private sector growth.⁶⁵ In fact, the brain drain (loss of skilled labour) is a form of exploitation of those countries that have trained their citizens only to lose them overseas.

One of the negative consequences of the brain drain on Africa's development is the destruction of virtually all tertiary institutions in the continent. Between the 1990s and 2000s, thousands of African academics from different tertiary institutions in the continent had been lost to most especially Western industrialised nations. The loss of distinguished academics (especially university lecturers with doctorate degrees, most especially Professors) was an unmitigated disaster on university education in Africa. Across the continent, this challenge has been driven variously by inadequate salaries, poor working conditions, inadequate research and teaching facilities, the budget cuts, frustration, social unrest generated by the Structural Adjustment Programmes between 1986 and 1990s) and political repression/persecution.⁶⁶

This could be corroborated with the argument of Kevin Shillington, a European historian, who noted that “Access to IMF and World Bank funds were tied to certain sets of preconditions known as Structural Adjustment Programmes (SAPs). These ‘conditionalities’, applied universally, were modelled on the practices of developed capitalist systems rather than on the specific needs and best interests of the individual African countries concerned.”⁶⁷ According to Onsando, there were over 300,000 highly qualified Africans in the Diaspora, of which 30,000 had PhDs. He further explained that the Presidential Committee on Brain Drain, which was set up in 1988 by the Babangida administration, Nigeria, revealed that between 1986 and 1990, the country lost over 10,000 academics from tertiary education institutions alone.⁶⁸ According to the statistics provided by Jibril and Obaje on the percentage of academic staff that were lost through the brain drain in Nigeria, only about 36% of the required number of academic staff for Nigerian universities were actually on the ground, and the rest had migrated to Southern Africa, the Middle East, or the Western industrialized countries.⁶⁹ The consequences of the loss of distinguished academics on university education in the continent are severe. Aside drastic reduction in quality education service, others include dearth of qualified professionals and stagnation in the process of knowledge production. This could be one of the reasons why none of the African universities has ever been rated / ranked among top 100 best universities in the world. However, most of the best universities in the developed countries have African scholars from continental homelands as members of academic staffs.

In the health sphere, the impact of the brain drain cannot be overemphasised. One major consequence of the brain drain in the health sector is the dearth of qualified professionals. The brain drain led to the flight of different categories of skilled health professionals such as consultants, doctors, pharmacists, nurses and social service personnel. This led to a direct and negative effect on the delivery, effectiveness and quality of services available to the public in both public and private health institutions in the home countries. According to Adepoju, brain drain has resulted in the inadequate delivery of healthcare services.⁷⁰ This challenge was as a result of the loss of many African specialists and consultants. Another major effect of the loss was the disparity in the ratio of health professionals to patients. For example, while in some parts of Nigeria, the ratio of healthcare professionals to patients can be as high as 1 to 41,000,⁷¹ in Liberia, one pharmacist was said to be servicing about 85,000 people.⁷² This was in contrast to the minimum health standard recommended by the World Health Organisation (WHO) for the developing countries, which emphasised that “to ensure basic healthcare services is 20 physicians per 100,000 people (that is 1 physician to 5000).⁷³ On the continent as a whole, the general ratio of physicians to patients was 1 to 8,000.⁷⁴ Chikanda explains that the spread of HIV/AIDS cases and number of infected people in some parts of African south of the Sahara desert increased due to inadequate health personnel. He emphasised that a large number of the patients were treated by a single nurse.⁷⁵ Onsando argues that one of the main reasons why Africa has found it difficult to effectively fight the scourge of HIV/AIDS in the continent was as a result of serious shortage of African health professionals.⁷⁶

In several African countries such as Kenya, Ghana, Ethiopia, Malawi, Zambia and Nigeria, the brain drain of medical professionals has continued to threaten the very existence of the countries' health services. For instance, according to the 1993 UNDP Human Development Report, more than 21,000 Nigerian doctors were practicing in the United States alone, thus leading to a shortage of doctors in Nigeria.⁷⁷ While Kenya lost an average of 20 medical doctors each month in the period between the 1990s and the 2000s,⁷⁸ Zambia only managed to retain 50 out of 600 doctors trained in the country's medical school from 1978-1999. Also, it was revealed that about one third of Ethiopian medical doctors left the country to practice in the developed countries during this period.⁷⁹ For instance, according to Randall Tobias, the United States Government's global AIDS coordinator, there were more Ethiopian-trained doctors practicing in the city of Chicago alone than in Ethiopia.⁸⁰

It is important to emphasise here that the flight of health professionals is not limited to doctors, it also affects nurses, pharmacists and social services personnel. The loss of nurses, especially during this period, was a growing phenomenon, which was fuelled mainly by its shortage in developed countries. For example, the United States had 126,000 fewer nurses than it needed and government figures show that the country could face a shortage of 800,000 registered nurses by 2020. Due to this shortage, the United States and other industrialised nations had to embark on massive recruitment of nurses outside, thus offering African nurses the opportunity to earn as much as 20 times their salaries.⁸¹ Chacha observes that about 17 countries south of the Sahara have less than half of the WHO minimum standard for nurses of 100 nurses per 100,000 population in their hospitals. He further explains that for example, Malawi has only 17 nurses per 100,000 people. In contrast, many Western countries have more than 1,000.⁸²

Financial and investment loss is another negative impact of the brain drain on Africa's development. The loss of finance and investment could be seen in terms of the amount of resources (money in particular) and time used in training these African professionals, who eventually migrated to the developed countries, as well as the amount used in employing experts from the Western hemisphere. The high rate of financial and investment loss occasioned by the emigration of skilled African labour on Africa's development during this period was unprecedented. African countries were funding the education of their nationals only to see them end up contributing to economic growth and development of developed countries with little or no return on their investment. Although there were variations in the financial and investment loss among countries in Africa, at the turn of the millennium, it was generally reported that the brain drain cost Africa over \$4 billion in the employment of an estimated 150,000 (mostly from the West) expatriate professionals annually.⁸³ The above argument could be corroborated with the observation of Boyo, who posits that due to the emigration of Africa's best and brightest minds, the continent spends US\$4 billion every year to hire 100,000 foreign expatriates.⁸⁴ Also, Oyowe observes that between 1985 and 1990, Africa lost more than \$1.2 billion of investment on the 60,000 African professionals who left the continent.⁸⁵

In terms of investment loss, between 1970 and 2008, the continent of Africa lost about US\$700 billion in human capital.⁸⁶ For example, in Kenya, according to the 2001 report of the UN Development Program, while it costs about \$10,000 to \$15,000 to train a university student for four years in an educational programme, it can cost nearly \$40,000 to train a medical doctor.⁸⁷ More so, according to the World Bank estimates cited by Tettey that between 1994 and 1997, South Africa lost 8.4 billion rand in tax earnings and 285,000 rand in GDP due to emigration of its professionals.⁸⁸ In fact, the brain drain of physicians from South Africa presents a classical example of how African countries have continued to lose investments and potential revenue due to skilled labour international migration. For instance, while it only cost the government of Alberta, Canada \$1.2 million to recruit South African physicians, the Canadian government makes a profit of \$10.4 million through this process.⁸⁹ In the area of financial loss, Onsando reveals that Africa spends about US\$4 billion per year (representing 35% of total official development aid to the continent) to employ some 100,000 Western experts performing functions generically described as technical assistance in the continent.⁹⁰ According to the *Globe and Mail* Canada saved nearly \$400-million by poaching doctors from Africa.⁹¹ Also, in the 1990s, the United States generated a savings of close to US\$4 billion from the migration of 21,000 Nigerian doctors into the country.⁹² The United Kingdom actively filled in labour shortages in the professional skilled sector. Its policy was designed to recruit students and foreign trained professionals to fill shortages that cannot and perhaps would not be filled by locals.⁹³ It was reported that Canada, Australia, the United States and Britain saved a total of \$4.5 billion through the recruitment of African doctors.⁹⁴

One major positive effect of the brain drain as being advanced by some advocates is remittances. Remittances can be viewed from two major angles, namely, family remittance and country remittance. According to Bucklaschuk and Wilkinson, remittance refers to “monies sent by immigrants to family members in their home country. These monies are used by families to elevate their quality of life and may assist in sending siblings and children to school, purchasing new residences, renovations to existing structures or other familial expenses”.⁹⁵ Remittances are a significant aspect of brain drain. It was reported that in 2003, over \$300 billion was sent from developed to developing countries by diasporic people living in the developed countries.⁹⁶ There are several reports with respect to yearly remittances of people in the African diaspora to their home countries. For instance, some reports approximated yearly remittances of African migrants to be between US\$10 and 40 billion.⁹⁷ For example, while in 2002 remittances to African south of the Sahara were put at US\$4 billion, in 2008, it was put at US\$ 20 billion.⁹⁸ However, there are significant discrepancies between documented remittances and undocumented remittances. Generally, undocumented remittances are believed to be significantly high.⁹⁹ According to the 2011 reports of the World Bank and the European Commission with respect to remittances by the African Diaspora, Nigerians and Ghanaians in the US were among those who remitted more than US\$1 billion to their home countries in 2006. Also, Nigeria was the only country within Africa among the top 25 remittance-receiving countries.¹⁰⁰ More so, in terms of sheer volume, the top three remittance recipients in Africa during this period were Nigeria (US\$3.3 billion), Kenya (US\$3.1 billion) and Sudan (US\$1.2 billion).¹⁰¹

Although statistics of exact figures for remittances are highly fragmented and vary, the advocates for remittances claim that remittances offset the negative impact of brain drain, which can be interrogated from two levels, micro and macro. First, at the micro level, remittances help to support the lives of family members and communities back home by helping to pay for expenses related to education, healthcare, food, accommodation, and the setting up of small businesses.¹⁰² Remittances also help increase the standard of living of families of emigrants. For instance, Adepoju reveals that remittances to rural areas in Burkina Faso cut poverty levels down by almost 10%.¹⁰³ Second, at the macro level, remittances have a significant impact on the economies of sending countries. Between 5 and 20% of African Gross Domestic Product (GDP) was derived from remittances. For example, about 5% of Nigeria's GDP was derived from remittances from across the globe.¹⁰⁴ Adepoju argues that remittances constitute the second most important source of foreign exchange after exports. He further explains that while in 2004, in Senegal, an estimated 2.5 million emigrants sent about US\$618 million home, which was equivalent to a third of the national budget, excluding informal transactions, in the same year, Ghana received a total of US\$1.2 billion in remittances.¹⁰⁵ Also, Malian residents in France remitted about US\$50 million, about the same amount as France's annual aid to Mali, and have built schools and health clinics, paid for road repairs and invested in small business enterprises in their home communities.¹⁰⁶ In Lesotho, remittances make up more than a quarter of its GDP.¹⁰⁷ Meanwhile, the critics of the positive impact of remittance argue that because remittances are spent on day-to-day necessities of life such as food, clothing, and social activities, remittances are not properly invested, and thus do not necessarily promote economic growth.¹⁰⁸

The emergence of modern of African Studies has been considered as one of the positive effect of the brain drain. The argument was that the brain drain led to the brain gain. With the emigration of African scholars into the Western hemisphere, there merged centres of African studies. According to Akanmu, by the 1990s, the best centres of African Studies were in the UK, Europe, and North America. He further remarks that the best institutions for Ph.D. programs in African Studies were abroad, that is, in the West, and not in Africa.¹⁰⁹

Concluding Remarks

The foregoing discourse has interrogated the brain drain, skilled labour migration and its impact on Africa's development between the 1990s and 2000s. It argued that the emigration of skilled Africans into the Western hemisphere was unprecedented during this period of study. Although there were variations in the number of skilled Africans that migrated from different African countries during this period, from the available statistics, there was concentration from Africa south of the Sahara with Nigeria, Ghana, Kenya and South Africa topping the list. It was revealed in the study that several factors, which were summed up as push and pull factors, facilitated the influx of skilled Africans into the United States, Canada, the United Kingdom and Europe (which were main destinations of skilled African immigrants).

While political persecution, insecurity, and lack of opportunities to utilise skills among others constituted the main push factors, higher wages, job opportunities, relatively good working conditions, relaxation of immigration policies and the phenomenon of new globalisation were the main pull factors.

The paper argues that the emigration of African professionals had immense impact on the socio-economic development of Africa in no small measure. The effects were both positive and negative. Although the receiving countries of African professionals saw the development as brain circulation, African countries saw it as substantial net outflow of talent from the continent. Although recent research on emigration in some developing countries provides evidence of significant gain from international emigration, such as the case of Mexico, especially with respect to remittances, technology and knowledge transfer, the impact of skilled labour migration on Africa's development is negative when put side by side the cost of training (in the home) and the return (through remittances). In spite of the divergent views among scholars on the economic benefits of international migration for the sending and receiving countries, our position here is that the receiving countries benefitted more than the sending countries. The importation of skilled African labour helped the developed economies to improve their global competitiveness to the detriment of the sending countries. Even with the issue of remittance, which the supporters of the brain drain raised as a positive benefit, evidences show that remittance flows to Africa were not only low, but were also with limited impact on national economies or potential to contribute to development. Thus, considering the infinitesimal nature and impact of remittances on the homelands, the paper submits that, it is not enough to depend on it for survival. This could be corroborated with the argument of Maulana Karenga, who contends that "it is not enough for the people of Africa to receive gifts purchased from years of theft of their own human and material resources. They must have control of their lives and resources and be educated and supported in their long hard suffering-filled journey to self-determination, self-reliance and sustained development."110

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