

**BRAIN DRAIN AND NATIONAL DEVELOPMENT IN NIGERIA**

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**NSUKKA**

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**DEPARTMENT OF POLITICAL SCIENCE  
UNIVERSITY OF NIGERIA,  
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## APPROVAL PAGE

Nwozor, Agaptus, a post-graduate student in the Department of Political Science, with Registration Number, PG/Ph.D./06/41046, has satisfactorily completed the requirements in seminars and research work, for the award of the Doctor of Philosophy (Ph.D.), in Political Science (Political Economy).

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## **DEDICATION**

This work is dedicated to all African scholars who resisted the tempting lucre of hard currency and stayed back in Mother Africa to courageously fan the dying embers of scholarship.

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The intellectual raw materials that shaped and culminated into this study could not have been sourced solely from the inner recesses of an individual. On the contrary, the study benefitted generously from several persons and institutions, whose direct and indirect assistance aided its completion. Indeed, without such assistance, the study would have remained in the realm of fantasy.

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## **ABSTRACT**

The thrust of this work is the evaluation of the expropriation of Nigeria's vital human resources through the brain drain and its implications for its overall development. Nigeria has been adjudged a top emigration country on account of the continuous efflux of its human resources to all parts of the world. Despite the lack of agreement about the exact migrant stock of Nigerians in the diaspora, Nigeria is listed among the top remittance receiving countries in the world. The implication of brain drain to Nigeria is that it serves as a feeder-zone for the human resource needs of other countries, especially developed countries. Undoubtedly, the erosion of Nigeria's human resources has had far-reaching negative effects on its development trajectory as the vital highly-skilled personnel needed for national development are lost. This study delineates certain specific development sectors of the Nigerian economy, such as the health, domestic investment, and technology acquisition and transfer, as the fulcrum of its investigation. It sets as its objectives the task of interrogating the effect of the brain drain on the efficiency Nigeria's healthcare delivery system; how the domestic investment incentives have boosted diaspora-led investment in the Nigerian economy, and whether the tighter regulation of the global regime of intellectual property rights are amenable to brain gain that can facilitate technology transfer. Using a combination of public choice and modern world system theories synthesised from the political economy theoretical framework, we generated relevant data through secondary sources and analysed them in the tradition of qualitative descriptive methodology using one-group time series research design. The study finds that the depletion of the stock of Nigeria's health professionals through the brain drain leads to inefficient healthcare delivery. This depletion is sustained by lack of political will by successive Nigerian governments to eliminate the conditions that conduce to the emigration of its highly-skilled health manpower and the relaxation of immigration policies by Western countries. Nigeria's domestic investment profile has been boosted through diaspora-led investments in the Nigerian economy. The tighter regulation of the global regime of intellectual property rights is inhibitive of diaspora-led industrial investments towards technology transfer. The challenge of diaspora integration in Nigerian development is locatable in the absence of coordinated domestic efforts in that direction.

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## **LIST OF ABBREVIATIONS/ACRONYMS**

AHWO	-	Africa Health Workforce Observatory
BITs	-	Bilateral Investment Treaties
BMA	-	British Medical Association
CBN	-	Central Bank of Nigeria
CIPs	-	Core Industrial Projects
CSM	-	Cerebro Spinal Meningitis
DCI	-	Development Corporation for Israel
DCs	-	Developed Countries
DOT	-	Directly Observed Therapy Centre
DTTs	-	Double Taxation Treaties
EOI	-	Export-Oriented Industrialisation
ESI	-	Export Substitution Industrialisation
FDI	-	Foreign Direct Investment
FEM	-	Foreign Exchange Market
FMOH	-	Federal Ministry of Health
GDP	-	Gross Domestic Product
GNP	-	Gross National Product
HIV/AIDS	-	Human Immunodeficiency Virus/ Acquired Immune Deficiency Syndrome
HM	-	Humanitarian Migrant
HQM	-	High-Quality Manpower
ICT	-	Information and Communication Technology
IDCC	-	Industrial Development Coordination Committee
IDPs	-	Internally Displaced Persons
IFAD	-	International Fund for Agricultural Development
IMF	-	International Financial Institution
IMF	-	International Monetary Fund
IMR	-	Infant Mortality Rate
IOM	-	International Organisation for Migration
IPRs	-	Intellectual Property Rights
IPTTOs	-	Intellectual Property Technology Transfer Offices
ISI	-	Import Substitution Industrialisation
LDCs	-	Less Developed Countries
LPR	-	Lawful permanent Resident

MDCN	-	Medical and Dental Council of Nigeria
MDGs	-	Millennium Development Goals
MMR	-	Maternal Mortality Rate
MNCs	-	Multinational Corporations
MTOs	-	Money Transfer Operators; Money Transfer Organisations
NABDA	-	National Biotechnology Development Agency
NASAC	-	Network of African Science Academies
NBS	-	Nigeria Bureau of Statistics
NCV 2020	-	National Council on Vision 2020
NDD	-	Nigeria Diaspora Day
NDIF	-	Nigeria Diaspora Investment Fund
NEEDS	-	National Economic Empowerment Development Strategy
NGOs	-	Non-governmental Organisations
NHIS	-	National Health Insurance Scheme
NHP	-	National Health Policy
NICs	-	Newly Industrialising Countries
NIDO	-	Nigerians in the Diaspora Organisation
NIEO	-	New International Economic Order
NIPC	-	National Investment Promotion Commission
NITDA	-	National Information Technology Development Agency
NMA	-	Nigerian Medical Association
NNMR	-	Neo-natal Mortality Rate
NNVS	-	Nigeria National Volunteer Service
NOIP	-	National Office of Industrial Property
NOTAP	-	National Office for Technology Acquisition and Promotion
NPC	-	National Planning Commission
NRF	-	National Resources Fund
ODA	-	Official Development Assistance (Aid)
OECD	-	Organisation for Economic Co-operation and Development
OPEC	-	Organisation of the Petroleum Exporting Countries
OPV	-	Oral Polio Vaccine
PBS	-	Points-Based System
PHC	-	Primary Healthcare
PPF	-	Production Possibilities Frontier

PRSP	-	Poverty Reduction Strategy Papers
R&D	-	Research and Development
RMRDC	-	Raw Materials Research and Development Council
SAP	-	Structural Adjustment programme
SBI	-	State Bank of India
SDRs	-	Special Drawing Rights
SFEM	-	Second-Tier Foreign Exchange Market
SOEs	-	State-Owned Enterprises
STDs	-	Sexually Transmitted Diseases
THE	-	Total Health Expenditure
TNCs	-	Transnational Corporations
TRIPs	-	Trade-Related Aspects of Intellectual Property Rights
U5MRk	-	Under-Five Mortality Rank
U5MRt	-	Under-Five Mortality Rate
UBE	-	Universal Basic Education
UCHI	-	University College Hospital Ibadan
UNCTAD	-	United nations Conference for Trade and Development
UNDP	-	United Nations Development Programme
UNIDO	-	United Nations Industrial Development Organisation
UPE	-	Universal Primary Education
WHO	-	World Health Organisation
WIPO	-	World Intellectual Property Organisation
WTC	-	World Trade Centre
WTO	-	World Trade Organisation

## **CHAPTER 1**

### **1.1 GENERAL INTRODUCTION**

The brain drain question in the development crises of African countries is not an entirely new phenomenon. It has been a recurring decimal in the development analyses of Africa since its contact with the Western World. Notwithstanding the supposed benefits of Euro-African contact, Africa suffered great losses than it gained from this contact: its natural path to socio-economic and political growth was derailed, thus atrophying its prospects of growth and development. Indeed, the fundamental stratagem employed to institute these losses was the wholesale and organized depopulation of Africa's human resources through the instrumentality of the slave trade, which Igwe (2002:398) affirms "lasted for hundreds of years up to the 19<sup>th</sup> century, and which affected or destroyed millions of innocent black Africans. ..." The notoriety of the slave trade is underpinned by its combination of human losses with human suffering, degradation and disorientation and, ultimately, the subjugation of Africa's developmental capacity (Babangida 1991:244).

A direct consequence of the pillage of Africa by the West was the foregone possibility of development. The human resources that were essential to trigger off development were lost to the Western World. The blood and sweat of these Africans contributed immensely to the consolidation of the fledgling western capitalist developmental trajectory. Coleman (1986:41) contends that the same period that saw Africa tumbling down the cliff to economic subjugation and asphyxiation also marked the emergence of Europe from medieval stagnation and its transmutation through agricultural, industrial and intellectual revolutions. In analyzing the impact of earliest Western onslaught on Nigeria via slave trade, Coleman (1986:40) asserts “the total effect of the slave trade upon Nigerian society, institutions, and peoples will, perhaps, never be known”.

The unquantifiable character of the effect of the depletion of African human resources is exacerbated by the unconscionable rapacity of capitalism. Capitalism, through the instrumentality of colonialism, neo-colonialism and contemporaneously, globalisation, created a world system of unequal relationship between nations. This unequal relationship, which characterises the world economic system, is moulded in iron-cast compartments that are so interconnected that exit from one sphere to the other has been made nearly impossible. The modern world system, which is compartmentalised into the industrialized, developed, newly industrializing, transiting and developing countries, appears to be a deliberate creation of the capitalist system to minimize tension in the world system. As Toyo (2002:8) succinctly puts it, “between the countries of Western Europe, the USA and Japan on the one hand and rest of the capitalist world on the other, it is obvious who has to go to whom for investment funds or the capital equipment vital for growth or development in today’s world”.

As it is, Africa appears to be “an excellent candidate for perpetual membership in the periphery” (Offiong 2001:ix). What has consigned Africa, and indeed Nigeria, to the position of “the wretched of the world system” is the contemporary brain drain that has skimmed the cream of their human resources (professionals) from the development challenge of the continent. There is a tendency in the Euro-American literature to attach recency to the brain drain phenomenon and its adverse effects (Carrington and Detragiache 1999; El-Khawas 2004:37). Such a recent periodization inheres from a narrow conceptualisation of what brain drain represents. The brain drain phenomenon is narrowly viewed as the emigration of highly educated workers, such as scientists, engineers, physicians and other professionals from developing countries to developed countries rather than the emigration of a nation’s labour power. The imputation of recency to the brain drain appears a clever ploy to undermine its historical significance in driving Euro-American development. The brain drain has always

been the hallmark of Africa's interaction with the developed countries. Essentially, there is a dialectical character in the transmutation of brain drain as its form and character are dictated by prevailing productive forces in each epoch. An important point to note is that every epoch has what it considers fundamentally important in its developmental matrix. While brawn (raw strength) was pivotal in the development schema of the slave era, in contemporary times, brain power (knowledge and skills) appears to be the reigning currency. To deny the importance of the "uneducated slaves" in the developmental matrix of pre-capitalist and early capitalist epochs and thus not recognise that their physical removal from their home countries to Europe and the Americas constituted a massive brain drain was decidedly self-deceptive and therefore begs the question. The observation of Babangida (1991:244-245) is apt:

The people so forcefully transported have been estimated to number from 10 million to 30 million. Those who were captured were the young and virile Africans, the very class on whom the development of the continent would have devolved.

The chaos accompanying the slave trade retarded the African march towards development, progress and advancement in science and technology. In fact the period of the slave trade was one of retrogression.

Conversely, the loss to Africa was gain to Europe and America as attested by the plantations that underpinned their prosperity. Three issues appear to distinguish the brain drain of the slave trade era from contemporary brain drain: first is, the repository of the ultimate decision to migrate (voluntary or forced); second is, the relative independence of the migrant to choose career path; and third, the freedom which the migrant exercises to send certain part of his earnings back to home countries (remittances).

The actual figure of Nigerian migrant population is a matter of uncertainty and speculation (Orozco and Millis 2007:3; Afolayan et al 2009:55) Orozco and Millis (2007:3) pointedly asserts that the "official statistics on Nigerian emigration are inaccurate and incomplete. For example, according to the United Nations, there are approximately 1.1 million Nigerians living outside their home country, representing 0.84 percent of the Nigerian population". The World Bank (2011:195) holds that 0.6 percent of Nigeria's estimated 154.7 million, or approximately 1.0 million people, are in the diaspora. These estimates are patently unrepresentative of Nigeria's migrant stock, bearing in mind that there is a steady traffic of Nigerians out of the country under the auspices of both personal arrangements and various immigration lotteries of the developed countries. Orozco and Millis (2007:3) estimate that about 3.9 percent of Nigerians, or 5.1 million people, reside abroad. Hernandez-Coss and Bun

(2007:40) have a different set of figures: they estimate that Nigerians living in the US alone are in the region of 5 million in addition to those living elsewhere in the industrialized world. Soludo (2007:21) estimates that about 17 million Nigerians are in the diaspora. Nigeria is generally recognised as a mobile country on account of the ubiquity of its citizens across the globe (Orozco and Millis 2007:1). There is virtually no extended Nigerian family that does not have someone in the diaspora, and who, often, is willing and likely to extend assistance to their relatives towards emigration. For instance, Emeagwali (2009:1) informs that he facilitated the emigration of 35 of his closest relatives, including his parents and all his siblings, nieces and nephews to the US. Also considering the likelihood that estimated Nigerian migrant stock might not include the undocumented, citizens of Nigerian ancestry, asylum seekers, refugees and trafficked persons, (as was done in the calculation of Nigerians in the UK according to Hernandez-Coss and Bun 2007:8), we estimate that the percentage of Nigerians in the diaspora based on its population is within five percentage bracket, or 7.25 million.

Remittances remain the most visible by-product of brain drain. Remittances represent home-bound portion of what the brain and brawn power of migrants has earned abroad. While, in certain quarters, remittances are considered adequate compensation for lost skills as they help to improve recipients' standard of living and reduce poverty as well as finance imports and investments (Spatafora 2005:84; World Bank 2006:86; Fajnzylber and Lopez 2008:2-3; Le 2010:1), in other quarters, its contributions to the home economy are considered insignificant considering that they are not only "compensatory and hence countercyclical" but also have "a negative impact on GDP growth" (Chami et al 2003:5). But, nevertheless, global pool of remittances have consistently increased in volume and thus carved a niche as a veritable source of foreign exchange earning. From US\$101.3 billion in 1995, the total global remittances rose to US\$131.5 billion in 2000 and US\$416.0 billion in 2009; with estimates for 2010 put at US\$440.1 billion (World Bank 2008:17; 2011:19).

Since 2002 when the Central Bank of Nigeria (CBN) started collecting data from banks and International Money Transfer Operators' (MTOs) bank agents, there has been a steady increase in the volume of remittances to Nigeria. Remittances to Nigeria in 2004 were put at US\$2.26 billion (Hernandez-Coss and Bun 2006:38). This figure jumped to between US\$ 9.22 billion and US\$17.9 billion in 2007 placing Nigeria in the bracket of top ten remittance recipients amongst developing countries (CBN 2007:228; World Bank 2011:195). The growth in the volume of remittances to developing countries, which according to the World Bank (2011:21) rose from US\$81.3 billion in 2000 to US\$307.1 billion in 2009 has

been interpreted by certain scholars as “a relatively attractive source of external finance for developing countries, one that can help foster development and smooth crises” (Spatafora 2005:70). Beine, Docquier and Rapoport (2001:275) have distinguished two growth effects in relation to brain drain – “ex ante ‘brain effect’ (migration prospects foster investments in education because of higher returns abroad) and an ex post ‘drain effect’ (because of actual migration flows) and assert that the overall perception of the impact of brain drain is dependent on which effect dominates. There is little doubt that the growth effects in relation to brain drain in Africa is ex post drain effect. The brain drain is a deliberate sap on the development expectations of Africa. As Oyowe (1996:59) puts it, “the cost to the home countries of losing their professionals is incalculable – in terms of both development and opportunities and loss of investment”. But many pro-migration scholars have argued that remittances mitigate the negative impact of the brain drain as they provide resources for investment as well as contribute to reducing the incidence of poverty in the home country (Tomori and Adebisi 2007:297-301; Spatafora 2005:72-73).

Taiwo (2007:20); Osili (2007:114) believe that although remittances possess great potential to generate positive impact, this is dependent on the end use to which remittance flows are deployed in the origin country. The difficulty in establishing how individual remittances have contributed to national development considering that most developing countries, including Nigeria, lack a coherent framework for the utilisation of diaspora remittances for holistic developmental purposes led us to take a close and critical look at how remittances have contributed to national investment portfolio. As IFAD (2007:2) avers, “today, the impact of remittances is recognised in all developing regions of the world, constituting an important flow of foreign currency to most countries and directly reaching millions of households – approximately **10 per cent** of the world’s population”

But remittances alone cannot compensate adequately for the human capital losses experienced by many developing countries. The truth is that there is scant room for comparison between the contributions of diaspora remittances (no matter how strategically deployed and utilised) and the loss of developmental initiatives that the emigration of these professionals represents. The brain drain – brain gain dichotomy is driven by the varying theoretical perspectives on development. Indeed, the attachment of extreme importance to the fallouts of brain drain (such as remittances, increased investments and transfer of technology, skills and entrepreneurship) and their elevation to position of primacy in national development matrix reflects orthodox theoretical perspective on development. Within this context, brain drain is perceived as stimulating western-form of development through such

instrumentalities as brain exchange, circulation and reverse-migration. But development is much more than copycatism or reliance on crumbs from the developed countries. It involves independent models anchored on domestic capacity and driven by domestic human capital.

Therefore, to point at the fallouts of brain drain and identify same as pivots of development is a paradox of sorts that requires critical examination and satisfactory resolution. Considering the development dilemma of Nigeria and the increasing recognition of the indispensability of human capital in the development matrix, this study critically interrogates brain drain in Nigeria and reassesses its dynamics in the light of the country's development trajectory in the rapidly transforming 21<sup>st</sup> century. Of specific concern to this study is the consideration of how brain drain has impacted on the efficiency of Nigeria's healthcare delivery as well as the direction of the investment potentials of the diaspora vis-à-vis domestic investment portfolio. It also considers the brain gain argument within the context of legislative and institutional frameworks for diaspora engagement in Nigeria's development as well as the synthesis of diverse national experiences of diaspora engagement in national development.

## **1.2 BACKGROUND TO THE STUDY**

Although Nigerians have been emigrating since the country's contact with the West, the earliest emigration was different from the contemporary type in terms of scope, purpose and effect on the country. Then, the scope of emigration was small as people left in trickles, the purpose was for self-enhancement through the acquisition of higher academic credentials from the well-developed academic system of the developed countries for national development, and the effect on the country was positive as the quality of its human capital was greatly enhanced. But contemporary emigration is different in terms of these parameters: it is threateningly widespread in scope; its purpose is motorised by personal consideration of survival and escape from the socio-economic and political contradictions of the domestic economy; and, its effect is far-reaching as it erodes the country's vital human capital base that is indispensable for national development. Another difference is that then, the people who left the country always returned to contribute to national development. In fact they left as unskilled and half-schooled young men and women but returned with enhanced skills and capabilities. But now, the people who emigrate are the highly-skilled, well-schooled professionals who, often, obtained their education through the subsidisation of government

thus, creating what has been described as brain drain. Among these migrants, there is scant contemplation of returning home as they naturalise in their host countries and become their citizens. The need to recover and harness these diaspora human resources and mainstream them into national development has been in the front burner of national and international discourse and has led to the adoption of several policy prescriptions. Several strategies have been put in place by Nigeria in its effort to mainstream its diaspora into national development. Until recently, there was nothing systematic in government's approach to diaspora issues. The Nigerian government's policies on diaspora issues were ad hoc, piecemeal and reactive. The earliest strategy adopted by Nigerian government was the recognition and conferment of dual citizenship rights to Nigerians. Although this policy has had salutary effects in maintaining citizenship ties between Nigeria and its diaspora, the policy was essentially motorised by the overriding elite concern to resolve citizenship crisis for their children who were born abroad. This view is strengthened by the absence of a counterpart policy to address diaspora issues in a productive way. It was in 2000 that former President Olusegun Obasanjo (1999-2007) began an enthusiastic programme of mainstreaming Nigerian diaspora in its development programmes, especially the attraction of foreign investments.

The presence of Nigerians in almost every country of the world, and their apparent relevance in those countries, contrasts sharply with the domestic development dilemma that tends to characterise their country, Nigeria. The country faces acute development challenges. Paradoxically, while many Nigerians are integral members of the science and technology teams abroad, the country's science and technology needs are contracted to foreign nationals. For instance, in 1997, the land mapping of Nigeria was carried out by some consultants from Canada, with about \$3 million dollars borrowed from the World Bank (Ojeme 2011). Also, Nigeria's satellite programmes, Nigsat 1 and 2, depended on the UK for vital technical expertise.

Since the 1980s, highly-skilled Nigerians have been emigrating in droves, ostensibly in search of greener pastures but actually to exit the domestic constraints that have undermined good life. Good life in this context connotes the existence of a conducive domestic environment that favours the practice and enjoyment of the proceeds of one's professional calling necessary to have good standard of living that guarantees high life expectancy. The World Bank Development Prospects Group reported in 2007 an estimated emigration rate of 36 percent for Nigerians with tertiary education (Mberu and Pongou 2010).

Emigration appears to have had untoward consequences on the trajectory of Nigeria's development.

This study, which examined the depth, extent and consequences of the brain drain phenomenon on Nigeria's development, was motivated by several factors: the first is the development paradox that characterises the Nigerian state despite its abundant human and material resources. This paradox is intensified by the empirical and anecdotal evidence suggesting the ubiquity of Nigerians around the world. The brain drain syndrome appears to have adversely affected several sectors of the Nigerian economy, especially the education, science and technology, and health sectors. The rate of emigration of physicians and nurses in 2007 was estimated, by World Bank sources, at about 13.6 percent and 11.7 percent respectively. At a point, these sectors were almost comatose. The relevant question is how to address the seeming unidirectional nature of the emigration of Nigeria's highly-skilled professionals.

The second factor is the increasing primacy of human capital in the development matrix and the paradox of penury in plenty: while Nigeria has an impressive pool of human capital abroad, it lacks them at home. In contemporary global setting, the shift in the emphasis from finance capital as the engine of industrialisation and development to human capital means that the more educated a person is, the more important they are valued in the schema of development. In view of this trend, the issue at stake is how Nigeria can evolve a brain gain strategy to leverage its human capital advantage in the diaspora.

The third factor is the burgeoning volume of remittances from Nigerians in the diaspora. Nigeria's remittance stock has been steadily increasing. The increasing remittance stock could be a product of two factors: more emigrants in the arena and improved reporting system of remittance flows. However, Nigeria currently occupies a position in the global top ten remittance-receiving countries. The relevant issue is whether remittances can compensate for the forgone human capital as well as the effect of its opportunity cost on Nigeria's development.

The fourth is the seeming similarities between slave trade of earlier epoch and contemporary labour migration. Extant analyses, aware of the negative effects of slave trade, place their emphasis on the trickle down effects of labour migration generally, and brain drain particularly. What are the actual linkages between brain drain and brain gain within the context of Nigeria's experience and how compensatory are they?

The fifth is the reconciliation of Western countries' double standard on brain drain: while they profess commitment to halt brain drain phenomenon from developing countries,

including Nigeria, their domestic policies tend to pull migrants. For instance, leading Western countries such as the US, UK, France, Australia, New Zealand and Canada recognise the debilitating effects of brain drain and yet, they have dismantled, liberalised, and modified their immigration laws thus simplifying immigration to their countries.

The consideration of the singular obsession of Nigerians with emigration and its effect on Nigeria's development is the sixth factor that motivated this study. This obsession is motorised, in the main, by the international commodification of labour, that is, the assignment of greater value to the labour power from the developing countries than these countries could assign. The issue, therefore, is how Nigeria can utilise its human capital in the face of international competition for manpower, considering its peripheral status in the international system

### **1.3 STATEMENT OF THE RESEARCH PROBLEM**

Current estimated statistics put the global migrant stock as at 2010 in the neighbourhood of 215.8 million people, up from 190.6 million migrants in 2005 (World Bank 2008:16). About 171.6 million of this current stock are from the developing countries and are "dispersed out" of their home countries and domiciled in other countries, especially developed countries, where they put their knowledge, skills and experience to use for the betterment of both the host countries and themselves (IFAD 2007:2; World Bank 2011:18,19). Although there is no consensus on the exact number of Nigerians living outside the country, it is generally acknowledged that Nigeria is a high migrant country.. Estimates vary widely and range from 1.1 million to about 17 million (Orozco and Millis 2007:3; Soludo 2007:21; World Bank 2011:195). The bases for these estimates are unclear. However, out of US\$351 billion remitted by migrants from developing countries to their home countries in 2011, Nigerian migrants accounted for US\$11 billion (Mohapatra, Ratha, and Silwal 2011:1-3).

The impetus to migrate is a product of interrelated factors spanning the domestic and international environments. Although there is a tendency to confuse brain drain with labour migration, there is a big difference. The difference lies in the innate and acquired skills and capabilities of the migrants. While labour migration could play some positive roles in the domestic economies of developing countries, in terms of dousing tensions and pressures from imperfect employment scenarios, brain drain is essentially negative as it erodes the vital

human capital necessary for national developmental purposes. This study, while taking a sweeping look at labour migration is concerned with the emigration of highly-skilled Nigerians and the effect which such emigration has had on the socio-economic and political formation of the country.

While modern migration generally appears to be anchored on individual decisions, these decisions are not made in isolation but within the context of the state system, especially their material condition within that system as well as the stimuli from the international system. Thus, the brain drain of Nigerian professionals and other highly-skilled personnel is not a product of isolated occurrence. It is a product of, and a response to, the stimuli from two interrelated sources: the domestic and international environments. Nigeria's monocultural economic base confers on it certain constraints that limit its expansion beyond a certain point. It is these constraints that underpinned the impetus for brain drain. The internal dynamics in the Nigerian economy such as economic stagnation, macroeconomic instability, political tension, inter-tribal and civil wars, famine and hunger, economic self-interest and sundry factors facilitated the seeming mass emigration of highly-skilled Nigerians (Afolayan et al 2009:65-67; Tomori and Adebisi 2007:303; World Bank 2006:59-63). In other words, the reality of the Nigerian economic situation reflected negatively on these professionals and thus, impelled them to search for where their skills could fetch them better earnings. Thus, brain drain is a manifestation of natural economic behaviour, although this economic behaviour is itself determined by the interaction of socio-economic and political forces.

While Nigeria's internal dynamics engendered and shaped the conditions that facilitated brain drain, it was the international stimuli that gave, and still gives, it concrete manifestation as well as sustained it. The political economy of the developed countries dictated the imperative of massive infusion of human capital, not only to maintain the status quo of the contemporary world order, but also to keep their leadership position in that world order within the threshold of competitiveness.`

There is the brain gain argument, which has mainly maintained that brain drain is a win-win process as it underpins the creation of net wealth for the world economy. It is estimated that an increment of an equivalent of 3 percent in the proportion of migrant workers in the labour force of developed countries would increase world welfare by over US\$150 billion per annum (Sriskandarajah 2005:4). Undoubtedly, there are positive "feedback effects" from the Nigerian diaspora in the form remittances, the creation of business and trade networks, and diaspora involvement in certain developmental projects

under the auspices of national and international agencies, but are these feedback effects compensatory enough of the forfeiture of the skills of these migrants?

The questions that arise and which derive their essence from the interplay of socio-economic and political forces within the Nigerian and international arena are:

- 1) Does the sustained depletion of the stock of Nigeria's health professionals through the brain drain necessarily lead to inefficient healthcare delivery?
- 2) Have domestic investment incentives boosted diaspora-led investments in the Nigerian economy?
- 3) Is the tighter regulation of the global regime of intellectual property rights inhibitive of diaspora-led industrial investments towards technology transfer?

#### **1.4 OBJECTIVES OF THE STUDY**

This study envisages to achieve both broad and specific objectives. Its broad objective is to examine the brain drain phenomenon within the context of Nigeria's development dilemma. This examination is at two levels: the state and the individual levels. At the state level, its examination involves the interrogation of the underlying forces that motorise brain drain, especially the interplay of the economic, social, and political forces in spawning and sustaining it. Another aspect of it is the evaluation of the policy and sundry strategies adopted by the Nigerian state to roll back, mitigate and contain the effects of brain drain on the trajectory of the country's development. At the individual level, it envisages to examine the primacy of economic factors over social factors, especially in shaping the decision of highly-skilled Nigerians to emigrate and the dilemmas that hinder reintegration in the country. The specific objectives of this study derive important insights from the broad objectives and include:

- 1) To determine if the sustained depletion of the stock of Nigeria's health professionals through brain drain necessarily leads to inefficient healthcare delivery.
- 2) To assess whether domestic investment incentives boost diaspora-led investments in the Nigerian economy.
- 3) To find out if the tighter regulation of global regime of intellectual property rights is inhibitive of diaspora-led industrial investments towards technology transfer.

## **1.5 SIGNIFICANCE OF THE STUDY**

This study has both theoretical and practical significance. At the theoretical level, it offers a new insight into the underlying basis for brain drain in the modern world system. The modern world system is characterised by compartments which are hierarchically arranged. The world system is powered by economic determinism and as such brain drain is a corollary, no, a necessary fallout from the economic marginalisation and strangulation of the developing countries including Nigeria. This study therefore evolves ideas which resolve the seeming disjuncture between brain drain and Nigeria's development crisis and explores strategies to convert the brain drain to truly brain gain outside the spheres of extant Eurocentric orthodoxy.

At the practical level, this study is significant as its evaluation of the entire architecture of migration with particular reference to brain drain and its effect on Nigeria's developmental quest provides the necessary clues to scholars and policy makers about its true nature and the true utilitarian value of remittances in the schema of national development. It also buttresses the argument that contemporary brain drain is a well thought-out strategy to ensure the peripherality of Nigeria through sustained depletion of its skilled professionals that are indispensably vital to its development. It evolves strategies on how the current tide of brain drain could be converted to brain gain, that is, how its positive effects could be maximised and its negative effects minimised in relation to Nigeria's developmental trajectory.

This study further has the potentiality of serving as a secondary source of data to future researchers on related subject matter.

## **1.6 LITERATURE REVIEW**

The central preoccupation of this section is the general and specific investigation of the impacts of brain drain on national development as captured in extant literature. Although, general works spanning other geographical boundaries and covering such areas as brain gain, labour migration, and ancillary areas are reviewed, the bulk of the review particularly focuses on case study works on Nigeria. In reviewing relevant literature on the brain drain phenomenon on Nigeria's development, the review delineates three developmental areas as the core of its inquiry, to wit brain drain in the healthcare delivery and the health sector,

domestic investment and international regime of intellectual property rights and technology transfer. The major aim of this survey is to establish not only the state of scholarship in these areas but also the nature of the knowledge gap to be filled.

**i) General Works on African Migration and Earliest Brain Drain**

The history of the African continent is compactly suffused with the expropriation of its human and natural resources. Usman and Falola (2009:1) opine that population movement is “synonymous with the history of Africa itself”. Population movement connotes physical movement by groups of humans from one geographical area to another. It involves three factors: the population of people moving must be substantial; the population must move outside the geographical area to another, often far-flung, and with remote possibility of coming back. The third factor is dependent on the cause of movement. Population movement could occur through three major mechanisms: voluntary, forced or induced. Africa has experienced all these mechanisms of population movement. At the earliest time, human migration was said to have started in Africa through *Homo erectus* which migrated out of Africa across Eurasia about a million years ago ([http://en.wikipedia.org/wiki/human\\_migration](http://en.wikipedia.org/wiki/human_migration)). Early human migration was voluntary as it was in the quest for survival. As Usman and Falola (2009:2) observe, these early movements were unsystematic and often involved entire groups or villages whose movement was in reaction to such negativities as changing climate and landscape, inadequate food supply and war.

Population movement had occurred in substantial scale and regular frequency in the history of Africa. Between 1400 and 1900, African continent experienced waves of population movements through the instrumentality of slave trades. Nunn (2007:3) identifies four simultaneous trades: the Trans-Saharan, Red Sea, Indian Ocean and Trans-Atlantic slave trade. The first three predate the Trans-Atlantic slave which was the largest and most well-known. The Trans-Atlantic slave trade route sourced young men and women from West Africa, West Central Africa and Eastern Africa who were then shipped to Europe and its countries in the New World. The combined effect of these slave trades was a massive and sustained depletion of Africa’s human resources necessary for development. According to Nunn (2007:4):

During the Trans-Atlantic slave trade alone, approximately 12 million slaves were exported from Africa. Another 6 million were exported in the other three slave trades. These figures do not include those who were killed during the raids or those who died on their journey to the coast.

The forceful relocation of vital human capital of Africa was for the benefit of economies of host countries. African slaves provided the labour needed to expand the Euro-American plantations (Harley 2002:12). According to reports, Britain accounted for 41% of shipments, followed by Portugal 29%, France 19%, Netherlands 6%, British North America/United States 3% and Denmark 1% (<http://www.pstalker.com/migration/ng-history-1.htm>). There was an inverse effect of slavery on Africa and slaving Europe: while for Africa, concerted efforts at enslavement depleted its vital human resources thus creating insecurity and weakening and destroying the village and state systems as well as other form of group aggregation, for Europe, it had positive effects on its economies. The collapse of the village and state systems meant that productive activities could not be coordinated, hence stagnation and underdevelopment. Rodney (1972:106-107) avers that economic activities within the African continent were adversely affected both directly and indirectly by population loss. The dominance of Britain in the slave trade and its eventual emergence in the mid-eighteenth century as the world's greatest trading nation was an indisputable pointer to the unevenness of slave trade. It should not be forgotten that it was the labour power of African slaves that drove up production in sugar, tea, tobacco and other plantations in Europe and the Americas which conferred dominance on the British economy. As Harley (2002:2) acknowledges, “two century (sic) earlier, England had been in an economic backwater, exporting unfinished heavy, woollen clothe to the Low Countries for further finishing before their sale throughout Europe”.

Africans, for over four centuries, were forcibly moved to Europe and the Americas as slave labour in sugarcane, tobacco, cotton and other plantations. By working in these plantations, African slaves contributed in strengthening the already economic advantages of Europe as the crops from these plantations were major foreign currency earners. In other words, while the toll on Africa with regards to the negative effect of slave trade was high, Europe rode to economic glory. Obadina (2008) contends that transatlantic slave trade and slavery constituted the building blocks of capitalism as the output of African slaves gave value to the colonies in the New World as well as contributed to the development and expansion of international trade.

Brain drain, like globalisation, is not a recent phenomenon. It has been a distinguishing characteristic of western contact with Africa and has had far reaching effects. There is a tendency by some Eurocentric scholars to conceptualise brain drain within spatiotemporal space of contemporary era. El-khawas (2004:37) adduces recency to the brain drain phenomenon:

It began in the 1960s following independence and has continued ever since. Every year, thousands of Africans head overseas looking for better opportunities. The numbers were small initially, but they later increased as political, economic and social conditions in Africa deteriorated.

Thus, brain drain is seen with the lens of today's human resource formation and requirements and therefore, conceptualised as the emigration of highly skilled persons from one country to the other, often from poor countries of the Third World to the rich countries of the developed world. Their operative consideration in evaluating the concept of brain drain is not the innate characteristics or humanity of the population but their acquired skills. And skills are narrowly defined within the context of contemporary needs of the West.

The attachment of contemporaneity to the periodization of brain drain misses the point as it has been an integral component of African existence and experience. A more productive way to look at brain drain is to situate it within the context of historical epochs. Each epoch in history has its developmental thrusts and the necessary instruments of achieving them. In the pre-industrial epoch which was dominated by agriculture, the most vital skill was raw physical strength as it was needed to plough the ground, manage the mechanical agricultural devices and tend the crops for long hours. Historically, the needs of the West dictated the kind of skills to be appropriated. In the pre-industrial period the economy of the western world required massive human labour that was non-existent in their domains. African slaves served useful production purposes which unleashed wealth and power for Europe. In this epoch,

African slaves became the human machinery, which constituted an indispensable portion of the means of production of the commercial crops in the plantations of the New World. The slaves represented a substantial fraction of the capital at the disposal of the Plantation Owners. It was this available capital which slowly developed the physical infrastructures of the New World, while at the same time enriching the mother-countries

of Europe where the Plantation Owners emigrated from (Aisein 2009).

The unavailability of this vital resource for development ignited both the mercantilist and imperialistic drive that led to the expropriation of African human resources to the West for over four centuries. As Rodney (1972:104) affirms, “when one tries to measure the effect of European slave trading on the African continent, it is very essential to realise that one is measuring the effect of social violence rather than trade in any normal sense of the word”. The violence which slave trade brought on Africa was not just social but extended to political, economic, cultural and psychological. The over four centuries of onslaught on Africa’s human resources had a decisive cumulative effect on the peripheral status that Africa occupies in contemporary world system. It eroded its potential of using its human resources to launch its development no matter how defined. This point is made more critical because the contributions of African slaves laid the foundation for the robust European economies that spawned the industrial revolution.

In others words, African labour spearheaded the economic revolution that endowed the West with advantages that positioned them at the forefront of development. In a way, economic prosperity in the West had a far-reaching negative impact on Africa as it translated to retrogression. This paradox was a product of massive loss of able-bodied young men and women. As Rodney (1972:105) avers, “slave buyers preferred their victims between the ages of 15 and 35, and preferably in the early twenties; the sex ratio being about two men to one woman. Europeans often accepted younger African children, but rarely any older person”. The implication of the selectivity of European slave buyers was that it skimmed the cream of African vitality and potential for development and appropriated it for European development. Slave trade was not so much a historical accident as a deliberate design to put the West in the forefront of development. And it did. Babangida (1991:245) observes:

The chaos accompanying the slave trade retarded the African march towards development, progress and advancement in science and technology. In fact the period of the slave trade was one of retrogression. While Africa and Europe were almost at par in terms of development up to the 15<sup>th</sup> century when great empires such as those of Ghana, Mali, Songhai, Kanemi-Bornu (sic), Binin, Ife, Oyo and Great Zimbabwe flourished, the slave trade destroyed all that was left of the African achievement and civilisation of which Ancient Egypt, Mecca and Axum were historic manifestations.

The direct effect of slave trade on Africa was the distortion it brought upon it: first, the virile segment of its population was poached to its developmental detriment. Second, there was a sharp distortion in the demographic composition of Africa that ultimately undermined its capacity to engender development. Thirdly, the profits made from slavery were the cornerstone of economic growth and technological advancement in Europe and the Americas.

**Table 1.1: Estimates of Slave Imports for the Whole Period of the Trade, 1441 – 1866**

<b>Region/Country</b>	<b>Population</b>	<b>Percent</b>
<b>Philip Curtin's Estimate, 1441-1866</b>		
South America	4,700,000	49.1
Caribbean	4,040,000	42.2
North America	651,000	6.8
Old World <sup>a</sup>	175,000	1.8
New World Total	9,381,000	98.2
<b>Grand Total</b>	<b>9,556,000</b>	<b>100</b>
<b>David Eltis's Estimate, 1519-1866</b>		
Central and South America	4,855,000	50.5
Caribbean Islands	4,252,200	44.3
North America	361,000	3.8
Africa <sup>b</sup>	131,000	1.4
New World Total	9,468,200	98.6
<b>Grand Total</b>	<b>9,599,200</b>	<b>100</b>

<sup>a</sup>Sao Tome, Madeira, Canaries, Cape Verde Islands, Europe

<sup>b</sup>Slaves captured by anti-slaving patrols, 1810-60 and re-landed in Africa.

Source: *Rawley and Behrendt* 2005:16.

Table 1.1 shows separate and independent reconstruction of the estimated African slaves that landed in various parts the world by Philip Curtins and David Eltis respectively. While Curtis put the total number of African slaves at 9,556,000, David Eltis estimated that 9,599,200 African slaves were “safely” landed. Both figures are within the same threshold.

But Rodney (1972:104) disagrees with these figures on three counts: one, their data only mirrored slaves that were “safely landed”; two, there were so many people at the time who had a vested interest in smuggling slaves and withholding data; and three, any basic figure of African slaves landed alive must make allowances to cover transshipment mortality, which averaged 15 – 20 percent.

Africa was yet to recover from the rapacity of slave trade when it was railroaded into the global capitalist system. Indeed, the integration of African economies into the global capitalist system underpinned the contemporary relationship of dependency: African economies became a poor reflection of the Euro-American economies, a feeder zone for the western economies. Contemporary brain drain is therefore a continuation of over four centuries of slave trade. Obadina (2008) records an analogy of which, more or less, depicts contemporary attitude towards brain drain:

The slave trade whetted their appetite [African elite] for the products of a changing world. Sadly it was not only tinpot rulers who were mesmerised by the glitters of western artefacts. An African slave in Cuba in the nineteenth century recalled how his people were captivated by the bright colour of European manufactures. It was the scarlet which did for the Africans: both the kings and the rest surrendered without a struggle. When the kings saw that the whites were taking out these scarlet handkerchiefs as if they were waving, they told the blacks, “Go on then, go get a scarlet handkerchief” and the blacks were so excited by the scarlet they ran down the ships, like sheep and there (sic) were captured.

The current phase of brain drain followed the same pattern. Having acquired skills that were under-utilised in a system characterised by instability and visionless leadership, the African professionals succumbed to the favourable immigration policies and prospects of better life in the developed countries. Both slavery and labour migration are sides of the same coin. A fundamental difference lies in the prevalent skills in each historical epoch. Both slavery and brain drain were fuelled by the various domestic contradictions in each epoch: while slavery ran on the petrol of elite avarice and covetousness, labour migration was impelled by inept leadership and limited economic opportunities. Both slave trade and brain drain have one major utilitarian value: they added immense value to western economies to the detriment of home countries. It is therefore patently erroneous to assume that brain drain is a contemporary phenomenon.

The abolition of slave trade was not borne out of moral duty to right the wrongs of slavery but depicted a new epoch in the trajectory of capitalism. Industrial revolution with its many diversifications required broader sources of raw materials and natural resources beyond what the plantations in Europe and the Americas could offer. It, therefore, led to a major shift in economic thinking and permutation that manifested in the abolition of the slave trade and the acquisition of colonies. The quest to obtain a chunk of the “Africa pie” spawned tension among the European powers that was resolved in the Berlin Conference of 1884 through the partitioning of Africa (Offiong 2001:9). The Berlin conference was a watershed in the integration of Africa into the global capitalist economy with its attendant peripheralisation. The structural relationship between Africa and the West as embodied in modern world system is that of unequal partners. Ake (1981:14) recognises the centrality of this integration in explaining African socio-economic and political experience when he asserts: “The integration of Africa into the world capitalist system by western colonialism and imperialism is the event which has had the most influence in shaping the economic and political development of contemporary Africa”.

The inequality between Africa and the West is a major stimulus that motorises brain drain. This inequality is depicted by the robust economies of western countries with expansionary prospects in contradistinction to the poverty-stricken economies of Africa with gloomy future. Brain drain is a systemic response to the innate attributes of the global capitalist system which engenders disjuncture between marketable skills and commensurable compensation system. Both slave trade and brain drain are human capital flight. For, as slave trade eroded the development capacity of Africa by siphoning its vital human capital, so does contemporary brain drain phenomenon. Estimates of Africa’s human loss via slave trade have been put at between 10 million and 200 million (Rodney 1972:104; Rawley and Behrendt 2005:15; Obadina 2008, [http://en.wikipedia.org/wiki/Atlantic\\_slave\\_trade](http://en.wikipedia.org/wiki/Atlantic_slave_trade)).

It is, indeed, a great paradox that even with the designation of August 23 as the International Day for the Remembrance of the Slave Trade and its Abolition by UNESCO in 1998 and a bouquet of apologies since 2006 by France, the US and UK for their roles in slave trade, they have continued to evolve policies to attract African professionals. In 2000, the US Congress raised the annual cap on the number of temporary work visas granted to highly skilled professionals under its H1B visa programme from 115,000 to 195,000 per year effective through 2003. In the same year, the British government, in cooperation with a research charity organization, the Wolfson Foundation launched a £20 million, five-year

research award scheme that had two major goals: to lure back UK's leading expatriate scientists and to attract top young researchers to the UK (<http://wikipedia>).

This seeming double standard inhered from the non-appreciation of the depth of destruction which slave trade inflicted on African development. The evil of slave trade was not just about the dehumanization, cruelty and injustice done to the individual, it extended to its effects on the collectivity of African population, its manifestations especially the subsisting underdevelopment, poverty and human misery that appear to be its unedifying trademark. The West's apology about slave trade is an empty rhetoric as contemporary brain drain which it promotes is as odious and devastating to African economies. Undoubtedly contemporary brain drain had the same set of effects that slave trade had on African development: massive distortions in its developmental thrust, stagnation and underdevelopment. Both phenomena ensured the subsidisation of the western economies and to its detriment. There has been a tendency in the analysis of slave trade to down play its pernicious disempowerment of the African continent and emphasize its liberating qualities. This reinterpretation of the effect of slave trade conferred on it "civilising mission" that is; that it provided "opportunity" for Africans to be co-owners of Europe and America and the New World (Aisien 2009).

As the Trans-Atlantic slave trade was Africa's visa to Europe and the Americas, it was as much its visa to underdevelopment, poverty and peripherality. The contention of Aisen (2009) represents the quintessential Eurocentric rebuttal that tended to downplay the ruinous propensity of contemporary brain drain. It is not out of sync or outside the sphere of possibility to speculate that if slave trade had not happened, perhaps, capitalism would not have developed the way it did neither would it have made Africa a peripheral partner. Indeed, Africa could have been the epicentre of capitalist expansion considering its human, natural and material endowments. But as Obadina (2008) has observed: "the loss in human resources had dire consequences for labour-dependent agricultural economies" of Africa. Slave trade also distorted and dislocated the rudimentary manufacturing activities as they effectively replaced indigenous products. Again, slave trade prevented the emergence of true business class as it engendered a new set of parasitic rentier class that depended on rents from their human cargoes (Obadina 2008). Indeed Nunn (2007:2) finds a "robust negative relationship between the number of slaves exported from each country and subsequent economic performance. The African countries that are the poorest today are the ones from which the most slaves were taken."

The favourable allowance made by contemporary analysts about the effects of slave trade is as a result of the political victory of President Barrack Obama in the US presidential election in 2008. But the victory of President Obama could not obliterate the negativities associated slavery. Kaba (2008:18) notes that by the beginning of the 21<sup>st</sup> century, people of West African ancestry constituted part of the most influential individuals in the world such as scientists of all kinds, professional entertainers, athletes, politicians, businessmen and women etc. And yet they were not in West Africa but in the US and other developed countries of the world. Like slave trade, massive migration of skilled Africans and other professionals has had untold toll on its developmental trajectory. This toll is evident in the negativities recorded by Africa in all indices of development. According to IFAD (2007:8) about 30 million Africans are in the Diaspora making contributions to the socio-economic and technological wellbeing of their host countries, often in the western hemisphere. As at 2006, twenty African countries were within the bracket of least developed countries (Kohnert 2007:6). With more professionals and skilled Africans emigrating in response to suction pressures from the core countries, the underdevelopment status of African countries has continued to deepen. Hundred of thousands of African doctors and health professionals are in the core countries where their expertise has contributed to improved healthcare system and life expectancy. Contrasted with Africa, life expectancy is on the downward trend as its healthcare system is comatose as a result of dearth of healthcare professionals and other supporting infrastructures. Statistics show that human resource needs of the West, just as in the pre-industrial revolution era, were poached from African and other developing countries necessitating the view that Third World countries subsidise the economies of the West.

Essentially, labour power, which in contemporary era, covers raw strength, talents, skills and knowledge, defers to the law of demand and supply and is pre-eminently preoccupied with the pursuit of highest compensation. The brain drain phenomenon is traceable to several factors. Not all migration can be classified as brain drain. What determines the classification is the level of training of the migrant as well as their overall relevance in modern production processes. Balaam and Veseth (2005:361) observe, “some migrants are responding to global economic forces, such as changing patterns of production and finance, while others are driven by distinctly local concerns, such as political repression or tribal warfare”. The emigration that leads to brain drain and which is pernicious to national development is the one that involves trained and highly-skilled professionals.

Balaam and Veseth (2005:361-2) have classified migrants as falling into:

- (a) Temporary labour migrants: This category comprises people who move out of

their countries of origin to other countries temporarily. Although Balaam and Veseth (2005:361) have averred that temporary labour migrants possess low job skills, it is certainly not true that this category is inhabited only by such low labour group. Very high level professionals could be temporary labour migrants. Such high-level professionals that often travel out of Africa on exchange programmes can be rightly categorised as temporary labour migrants;

- (b) Highly-skilled and business migrants: who may be temporary or permanent. These could be staff or consultants of multinational corporations;
- (c) Irregular migrants: Those that are illegal immigrants on account of their undocumented status in the host country;
- (d) Refugees and Internally displaced persons (IDPs): those who live outside their host countries on account of natural or man-made disasters;
- (e) Asylum seekers: those who have fled their countries as a result of political persecution, war or life-threatening scenarios;
- (f) Family members: those who are emigrating to join family members who had previously left the home country.

The forces that shape brain drain are both domestically generated and externally induced. Internally, the continuous search for opportunities for a better deal in terms of personal growth and professional fulfilment has been part of the propelling forces in the emigration of skilled professionals from Nigeria to the developed world. And these opportunities appear not only scarce but highly circumscribed owing to the position that Nigeria occupies in the modern world capitalist system. Nigerian economy within the milieu of the modern world capitalist system is faced with economic difficulties of monstrous dimensions. Nwozor (2005) links it to what he termed the “commodity trap”: Nigeria serves as the feeder zone, supplying raw materials to the developed countries and importing finished goods from them. The precariousness of this position manifests forcefully in periods of global commodity price slump. As Keating (2001: 3) observes, between 1965 and 1995, many Third World countries, but particularly those in the sub-Saharan Africa, had negative rates of economic growth. According to the World Bank classification of economies in 2009, only Equatorial Guinea occupies a space in the hierarchy of high income earners in the world income map. Botswana, Gabon, Libya, Mauritius, Mayotte Seychelles and South Africa are listed under upper middle income, the rest countries of Africa are lumped in the lower middle income and mainly low income brackets. Nigeria is located in the low-income bracket (World Bank 2011:391). The deep-seated contradictions in the Nigerian economy as a result of its

peripheral status in the modern global capitalist system are epitomised by prevalent poverty and poor development indices.

The nature of African economies especially their incapacity as a result of their monocultural orientation imposes limitations on their prospects for expansion. African economies (except to some degree South Africa) are characterised by:

Primary production, low share of world trade, low manufactured output and exports, low savings and investment, dominance of ODA and low private capital inflow, rapid population growth, dominance of public sector vis-à-vis a weak private sector, heavy external debt (CBN Briefs 2002-2003/05:35).

These characteristics are true of the Nigerian economy. What this implies is that the Nigerian economy is acutely limited in terms of engendering the requisite conditions for the absorption and optimal utilisation of their skilled labour. But despite its limited capacity to optimally utilise its skilled human capital, their mass emigration engendered domestic contractions that foreclosed the likelihood of long-run expansion that could have positively positioned its economy (Federal Ministry of Information 2000:128).

The pernicious consequences of brain drain on African economies are often explained away in terms of being skewedly imbued with positive potentials for domestic growth. Writing generally about Africa, Rena (2008) avers that emigration provides African skilled professionals the opportunity to chip away at the vast inequalities that characterised the world system and thus accelerate progress through the acquisition of higher skills. These newly acquired skills are deployed to the benefit of the domestic economies.

The inelasticity of opportunities in African countries, including Nigeria, is not only the direct consequence of integration into the global capitalist system but the sustained conspiracy of the developed countries. As Rena (2008) avers:

Africa's enormous agricultural potential is vastly untapped. Africa's vast mineral wealth and strategic significance have encouraged foreign powers to intervene in African affairs. During the Cold War era, 1945-1990, there was increasing super-power intervention in Africa. The United States and the Soviet Union were major players on the Africa scene.

The major powers found willing collaborators in Nigerian elite, whose lack of sense of patriotism contributed in effectively holding down its economy in the mire of underdevelopment. Despite Nigeria's legendary endowments in mineral and natural resources

including a uniquely diverse ecosystem, its economy is monocultural and lacks the capacity to add value to these resources. The effect is that human development indicators are miserably uninspiring and hopeless. Rena (2008) argues that the stupendous revenues from these endowments mainly fuelled “state corruption, environmental degradation, poverty and violence rather than badly needed development. It is reported that Nigeria’s receipts from oil between 1973 and 1981 were in the region of over US\$60 billion (Ikpeze 2004:6).

Brain drain is part of the process in the exploitation chain in the world system. Therefore, the argument of mutuality in terms of sharpened skills of the émigrés is flawed. This is so because the value added to the skills of African professionals is specifically tailored to meet the needs of the host countries’ economies and may be incongruent to the Nigerian situation. Again, there is no guarantee of prompt availability of these migrant professionals when they are needed as majority of them have permanent resettlement in their host countries as their goal. Once the African skilled professional leaves the shores of his/her country and is absorbed into the economies of the host country, their new adopted country becomes their primary constituency and the fruits of their skills are deployed to its further development. According to the United Nations, an African professional working in the US contributes about US\$150,000.00 per year to the US economy (Emeagwali 2009:2). Contrasted with this is the estimate of UNCTAD that “one highly trained African migrant between 25 and 35 years, the age group into which most of the Africans going abroad fall, represents a cash value of US\$184,000 at 1997 prices” (Rena 2008). What this figure represents is the roughly calculable loss, which Africa suffers on each of its migrants domiciled in the major cities of the West.

There is no doubt that there are likely positive feedback effects associated with the migration of the individual skilled professional. But the point that requires detailed elaboration is whether these effects are merely compensatory or a pedestal to effect greater socio-economic and political changes necessary for development. Available evidence suggests that the so-called brain gain or brain circulation to the home country is at best, probabilistic. There are pockets of evidence linking certain developmental initiatives to the diaspora in countries like China and Mexico but the percentage of skills transferred to home countries is not only tokenistic but mere spill-over. Africans who migrated to the US, and indeed other parts of the developed countries contribute 40 times more wealth to their host countries than to the African economy (Rena 2008; Emeagwali 2009:2). What this means is slow death for Africa’s development prospects. The situation is made worse by the institutionalised global legal frameworks that inhibit the “globalization of knowledge”. As

Balaam and Veseth (2005:336) recognise, “tight legal controls, copyrights and licensing often curbed LDCs’ access to such technology...” as might be vital for the take-off of African economies. In other words, with these inhibitions on the way, there can never be wholesale harvests of the skills of the African diaspora for Africa’s development.

The external forces that motorise migration are rooted in the nature of role assignment in the international economic system. By this arrangement, almost every African state acts as a feeder zone. By the pervasiveness of brain drain, almost every African country suffers from the dearth of relevant professionals to man and drive the critical sectors of their economies towards development. The effect of brain drain is that it “increases the scarcity of highly-needed skilled labour in developing countries and consequently reduces long-run economic growth and income “(Research Group on the Global Future 2005). And conversely, the destination countries increased the abundance of highly needed skilled labour and, thus, achieved better ratio of such professionals to population as well as short-run and long-run economic growth and global domination.

There had been a tendency to downplay the effect of brain drain on Third World underdevelopment by projecting arguments of mutual advantages and benefits to both the origin and destination countries. For instance, Teson (2008:2) claims that “most of the time there is nothing unfair about the brain drain, whether one considers it from the standpoint of the emigrant, the source country or the host country”. The same argument had been put forward by the apologists of slave trade in their attempt to numb the psyche of the world about the disastrous consequences of slave trade as well as its detrimental effect on African development. European and American scholars contended that despite the “moral evil” associated with slave trade it was nonetheless “economically good” for Africa as Africa gained wealth from the trade as well new food crops (Rodney 1972:110). What has not been demonstrated by these apologists is whether the wealth gained by African was commensurate with the wealth they created for Europe.

Contemporary brain drain was anchored an economic principles and designed to target the skilled personnel that would add value to the economies of the destination countries. Beine, Docquier and Rapoport (2001:276) consider education as the engine of growth. This much is evident in the new immigration policies that tended to lower entry conditions in Europe and North America and Australasia: emphasis is laid on the possession of certain minimum academic attainment as part of the conditions that qualify an applicant for consideration. In other words, intending immigrants are expected to possess certain minimum academic qualifications that would make them pliable enough to fit into critically

relevant sectors of their destination countries' economies. This point is true of many developed countries especially the US whose immigration policy is based on both individual skills and quota system (Beine, Docquier and Rapoport 2001:285).

It has been argued by some scholars that the international pressures necessitating brain drain and the prospects of higher wages motivate individuals to acquire higher education which in turn leads to the attainment of an overflow of human capital necessary for the source countries' development. They called this "beneficial" brain drain (Beine, Docquier and Rapoport 2001:288). A critical issue which is downplayed and glossed over is the time frame needed to educate people as well as the replenishment questions. For sure, the hiatus created between emigration and replacement potentially deepens the development dilemma of the source countries. The replenishment dilemma of African human resources is made more critical by the absence of institutional support to African Universities and centres for higher education. Compared to other continents such as Asia and Latin America which have functional academic cooperation and partnership agreement with the EU and receive financial support from the European Commission, Africa is not accorded any attention that is more than cursory. This scenario led Mohammed (2005:8) to observe:

This can only be viewed as a clear confirmation of the low priority accorded to Africa by the EU policy makers regarding higher education partnerships and academic cooperation. It is also an indication of the extent to which Africa's role in the global production of knowledge had been downgraded.

Another strand of the argument on mutual and reinforcing benefits is anchored on remittances. Not only is it argued that remittances offset the cost of education of emigrants on the origin country, they also actually serve as investment capital which contribute to the expansion of development prospects of the source country (Batista, Lacuesta and Vincente 2007:6). It has been suggested that African diaspora constitutes a brain reserve or brain bank that could be tapped to assist in resolving the developmental challenges facing Africa (Mohamoud 2005; Agrawal, Kapur and McHale 2008). In other words, Africa's human resources in the developed countries are held on trust and still available for the utilisation of the source country. Nothing can be further from the truth. The point is that the feasibility of such happening in grand scale is doubtful bearing in mind that the institutions where these skilled personnel are working might not be disposed to releasing them on extended period of time outside the framework of their vacation period.

It is important to differentiate between brain drain within the group of core countries and brain drain that is characterised by a unidirectional movement of skilled and semi-skilled personnel from the periphery countries to the core countries. While brain drain within the former is not only reinforcing, associated shortcomings are assuaged by influx from the developing countries. In other words, brain outflow is matched by brain inflow leading to relative equilibrium. In spite of the ample compensation of Canadian brain drain (to the US) through brain gain from the rest of the World, Devoretz and Laryea (1998:1) argued that the effect of brain drain on Canadian economy was real and costly. Contrasted with Nigeria where brain drain is unidirectional and creates serious human resource gap, the effect of brain drain is not only real and costly but destructive and anti-development. This point is particularly true since the response to the shortfall in human resource capacity in African countries was the infusion of western “experts” and consultants” into these economies with dire financial consequences. The UNDP estimated that Africa spends about US\$4 billion a year to cover the human capital gap (BBC 2001; The Africa Monitor 2007). What this implied was that the progress of African countries towards development was already mortgaged. Mohamoud (2005:8) acquiesces that brain drain,

Is impeding potential economic growth, and remains a *handicap for sustainable development* in many countries in Africa. Given the limited stock of skilled professionals in Africa, the continued exodus of the enormous human capital, if it continues at the current rate, will condemn the continent to the unenviable status as a perpetual net loser of talent and innovative capacity.

Easterly and Nyarko (2008:2) argue that brain drain has both cost and benefit for Africa. In other words, Africa gains as much as it loses. There is no doubt that brain drain yields some benefits to Africa especially at the micro-level, but the loss associated with it especially in terms of development crisis at the macro-level far outweighs whatever gain attributable to it. Evidence abounds regarding the positive impacts of immigrants on GDP per capita growth of the host countries. After examining the economic impact of immigration on host country with particular reference to Norway, Feridun (2005:359) concludes that “when level of immigration increases GDP *per capita* also increases”. He also contends that the development of the Norwegian society will depend among other things on whether the country is capable of securing a successful integration of foreigners (Feridun 2005:359).

A major determining factor in the whole question of migration is that there is acute disequilibrium in the means and ends necessary to power and achieve high productivity. Brain drain is a stop-gap measure and is strictly designed to benefit destination countries. Therefore whatever benefits that accrue to the individual, in terms of higher wages, and to the source countries, in terms of remittances, are mere fallouts which are outside the core contemplation of the various immigration policies of the western countries. The core contemplation of tempered immigration policies by the West was to address their shifting demographic composition As Nyarko (2010:11) records:

Africa currently has, and is projected to continue to have, a relatively young population, while that of Europe is projected to become much older over time. While large numbers [of] Africans will be looking for work, large numbers of Europeans will be in need of services and support during their old age. Estimates state that there will be a short-fall of 20 million skilled and non-skilled workers by 2030.

What this implies is that Africa remains a veritable source of human resource supply. Nyarko (2009:6) has attempted to downplay the debilitating impact of brain drain by arguing that “the big issue with high-skilled labour in many sub-Saharan African nations is not the brain drain, but the exceptionally small numbers of highly skilled workers”. In other words, that the problem of African development is not the emigration of already trained personnel but the incapacity of African states to deepen the pool of their skilled professionals. In furtherance to the argument using the health sector as an example Nyarko (2010:8) posits that if all the drained doctors were to return to Africa, the average ratio of doctor –patient which is in the neighbourhood of 11,000 in Ghana and 88,000 in Malawi would never compare with the doctor-patient ratio in the developed countries which averaged between 227 and 500. This argument seemed to have missed the point. The issue is not the sheer number of skilled personnel that have emigrated but the percentage of migrants in relation to the total stock of such skilled professionals. UNCTAD (2007) reports that human capital loss in LDCs range between one third and half of trained professionals. Again, the question is not about comparison with the West on doctor-patient ratio or any of such indices or narrowing the gap in science and technology, but on the foregone opportunities of Africa to develop at its pace with its manpower. It is all about the relevant skilled personnel being available in Africa to drive the necessary parameters of development at the pace of Africa. There are ample possibilities that had the vital human resources remained in Africa, the continent would have

moved forward farther away from the level of underdevelopment it is currently trapped and closer to the run-way to development. As UNCTAD (2007) avers,

Lost “human capital”, as it is called, can have serious consequences. The work of skilled professionals is a precondition for upgrading the production structures and the exports of LDCs, and for improving the sophistication of domestic businesses not to mention for improving domestic health and education, which benefit entire population. Without enough trained agronomists, biologists, engineers, scientists, doctors, nurses and information and communication technology (ICT) professionals, it is impossible for the firms and farms of LCDs to use technology to upgrade their products and efficiency and that makes it difficult for them to face foreign competitors. The emigration of qualified people thus damages long-term growth and development prospects. This is particularly true for LDCs, given their relatively low populations of skilled professionals.

The assumed symbiotic benefits accruable from migration stop at the threshold of the individual. At the macro-level, migration has deepened the contradictions of underdevelopment and sucked the prospects of African development into the eddy of subservience in the modern world system.

## **ii) Development and Underdevelopment Issues in the Migration and Brain Drain Debate**

The concepts of development and underdevelopment have remained contentious within the social sciences. The contention surrounding their exact meanings inheres from the ideologically kaleidoscopic colourations that are attached to them. According to Igwe (2002:115) concerns with development in all its ramifications – economic, political, socio-cultural, technological, individual, etc –acquired a boosted impetus with the post-World War II instant emergence of many new states that had just secured political independence after more than 500 years of Western colonialism, slave trade and other indescribable forms of inhumanism.

The contending ideological schools, the orthodox and radical variants, conceived development differently. The radical variant rose as a result of the failure of the orthodox prescriptions and explanations to transform and illuminate the forces germane to engendering

development. The orthodox school conceived development in terms of modernisation and integration (Igwe 2002:115). The major international institutions are perennially concerned with issues of development. It was this concern that led the United Nations (UN) to declare the 1960s as the Development Decade through its General Assembly Resolution 1710 (xvi). The crux of the Development Decade consisted in the objective to:

Accelerate progress towards self-sustaining growth of the economy of the individual nation and their social advancement so as to attain in each under-developed country a substantial increase in the rate of growth, with each country setting its own target, taking as the objective a minimum rate of growth of aggregate national income of five percent at the end of the decade (Quoted in Offiong 1980:1).

The UN Development Decade envisaged development as a gradual and orderly movement towards an ideal state of modernism. Development within this context was conceived in accordance with the Western paradigm that equated development to efforts deployed to, or march towards a pseudo-Western system (Igwe 2002:115). As Ollawa (1981:2) further elaborates, development within this paradigm was conceptualised as orderly change toward the realization of capitalist economic and western democratic political structures and underdevelopment as a departure from, and the persistence of internal factors or pre-capitalist structures.

The lack of development, or better still, underdevelopment, which characterised African states including Nigeria after the UN Development Decade led to a reappraisal of the western concept of development. Western conceptualisation of development emphasizes the replication of the characteristics of western economies. So, to western developmentalist, emphasis is focussed on such indices as industrialisation, economic affluence, military hegemony, advanced technology, urbanisation and the parliamentary political process. Also, such economic parameters and aggregates as gross national product, aggregate investment and capital accumulation and the sectoral distribution of employment and output constituted the defining attributes of development (Nnoli 1981:21; Olopoenia 1983:14).

The orthodox conceptualisation of development has been challenged by scholars of the radical school on account of its inability to bring about the transformation of the African economies to take on the characteristics of the developed countries. Nnoli (1981:21) criticises the orthodox conceptualisation of development on the ground that it is a mere checklist of artefacts and argues that development transcends the acquisition or replication of

the characteristics of western economies. Within this school, development is conceived in term of progression from a lower and often undesirable state to a high and preferred one (Olopoenia 1983:14). Such progression necessarily entails an “all-round interconnected progressive transformation of man, society and nature, made possible by his incremental mastery over them...” (Igwe 2002:115). A central question is: what constitutes the parameters of the ideal higher state that nations would aspire to attain? And herein lies the point of departure between the orthodox and the radical schools. While the orthodox school props up the DCs as the ideal high state which the African and Third World countries should aspire to emulate in their material characteristics and attempt a catch-up, the radical school insists that such a higher state is a trajectory from the periphery to some part of the centre, if not the centre of the international political economy (Igwe 2002:116).

The contemporary emphasis of development revolves around man and his creative energies as well as his interaction with the environment within the state formation. Following this line, Nnoli (1981:36) conceives development as,

A dialectical phenomenon in which the individual and society interact with their physical, biological and interhuman environments transforming them for their own betterment and that of humanity at large and being transformed in the process. The lessons learned and experiences acquired in this process are passed on to future generations, enabling them to improve their capacities to make further valuable changes in their interhuman relations and their ability to transform nature.

Development, therefore, targets man as its centrepiece. In other words, the purpose and end of development is the upliftment of man to the highest point possible through the manipulation and transformation of nature and the environment. Such transformation does not depend on what Nnoli (1981:21) describes as “a checklist of artefacts” but on the capacity of contemporary state formations to independently sustain its own kind of progression. It is not the acquisition of the “good things of life” - those sets of luxurious personal and national effects that ameliorate the difficulties of living or increase the outside perception of a state’s power and wealth - that determines development but the exclusive control of the productive forces in such a way that the overall well-being of the individual is satiated. Toyo (2002:566) opines that development is not simply industrialisation although industrialisation is part of it. It involves independence or self-reliance as well as growth-promoting changes in relations of production in the distribution of income among people in the economy.

Offiong (1980:21), Nnoli (1981:36), Olopoenia (1983:23-4) see real development as

involving a structural transformation of the economy, society, polity and culture of the Third World countries that permits the self-generating and self-perpetuating use and development of the people's potentials. Dudley Seers poses three fundamental questions that put the meaning of development in proper perspective in the following manner:

The questions to ask about a country's development are therefore, what has been happening to poverty? What has been happening to unemployment? What has been happening to inequality? If all three of these have declined from high levels, then beyond doubt this has been a period of development for the country concerned. If one or two of these central problems have been growing worse, especially if all three have, it would be strange to call the result "development" even if per capita income doubled (cited in Olopoenia 1983:23).

Development, thus reflects widespread attack on, and reversal of, absolute oppression, poverty, unemployment, inequalities and all other manifestations of exploitation that tend to consign the economies of Third World countries to the periphery of the global economic system. So, instead of development being synonymous with recreating the conditions of life in the DCs, and the provision of such infrastructures as airport, seaports, super highways, sophisticated institutions, it implies "both redistribution with growth and the meeting of the basic needs of the masses..."(Olopoenia 1983:23).

What the new thinking on development emphasizes is investment in people in order to sustain the thrust of development. For instance, both the "basic needs" and "redistribution with growth" deal with the liquidation of poverty, unemployment and inequality by providing basic necessities for decent livelihood for the great majority of the population and the redistribution of economic opportunities in a more egalitarian direction. Olopoenia (1983:24-5) holds that: "... for development to be attained in a growing economy there must be a deliberate effort not only for meeting basic needs but also for making it possible for a majority of the population to participate in and benefit from the process of economic growth".

Development does not begin and end with the creation of the necessary conditions for people to meet their basic needs or to partake in reaping the benefits of economic growth; it involves a dynamic and continuous transformative process towards sustainability. Offiong (2001:223) emphasizes that sustainable development depends much on investing in people. It is human beings that are principal means of achieving development in any economy. For instance, the rapid growth of the South East Asian economies depended on their investment

in education which increased their pool of skilled professionals for their industries (Toyo 2002:538). The plight of Nigeria and African development is its inability to keep its trained personnel as they are poached by the DCs. Africa exports a large percentage of its graduating manpower to the US and Europe.

The nature of African incorporation into the world capitalist system and its current position in that system dictate its development trajectories. Africa occupies the periphery where they have been doomed to live at the pleasure of the DCs and they do not pretend that they desire African countries to exit their peripheral status. Over the years, the DCs have deployed one strategy or another to ensure the circumscription of independent African development. For instance, after the resolution of the sixth special session of the UN General Assembly in 1974 calling for a New International Economic Order (NIEO), the West formed a counter group code-named the G7 (now G8). The programme of action for NIEO consisted of the facilitation of the pace of development and the change of the unequal economic balance between the LDCs and the industrialised states (Balaam and Veseth 2005:337). Contrarily, the G7 which was formed in 1975 was to ensure the checkmating of the increasing boldness of the LDCs. It should be recalled that prior to the bold call for NIEO, OPEC had set the stage for Third World activism toward the reordering of the global capitalist system. OPEC-sanctioned embargo on oil shipments to some industrialised states jolted the DCs as it led to a 400 per cent increase in the price of oil (Balaam and Veseth 2005:337). The purpose of G7, therefore, was not only to protect the stranglehold of the DCs on the global capitalist system but to ensure that new economic power blocks would not emerge outside the framework and conditions stipulated by them.

Brain drain, which metamorphosed from slave trade, has effectively depleted the pool of skilled professionals needed by Africa to engender its development. The various immigration policies in the DCs attest that brain drain is not accidental but a premeditated strategy to frustrate African development. The DCs were able to create the necessary conditions for the harvest of African brain by its bouquet of economic reforms which they forced down the throats of African and Third World countries through the Bretton Woods institutions of the World Bank and the IMF. These economic reforms, which were designed by the IFIs to supposedly tackle internal factors undergirding Africa's domestic contradictions helped them and the DCs to have unfettered control of their economies such that their claims to national sovereignty are questionable (Offiong 2001:19).

Despite the positivities attributed to brain drain such as remittances, brain gain and brain circulation, these are not adequate enough to drive development. In actuality, brain

drain has deepened Nigeria's development dilemma while enhancing that of the DCs. As Andre Gunder Frank (cited in Meier 1995:107) asserts,

Underdevelopment is not simply non-development, but is a unique type of socio-economic structure that results from the dependency of the under developed country on advanced capitalist countries. This results from foreign capital removing a surplus from the dependent economy to the advanced country by structuring the underdeveloped economy in an "external orientation" that is characterised by the export of primary commodities, the import of manufactures and dependent industrialization.

The centrality of knowledge in the contemporary phase of capitalist expansion has made Africa's brains prime targets especially with distortions in the demographic make up of the DCs. The effect of brain drain generally on Africa is the erosion of the basis to anchor its march to sustainable development. As Toyo (2002:559-60) has contended, "investigation in Nigeria and some other LDCs revealed that poverty in capital was not the main constraint to development. More serious were entrepreneurship and technical knowledge which are most potent when they move together". Nigeria is categorised as a highly mobile country, by which is meant that a significant proportion of its population is in the diaspora making contribution to their host economies and conversely denying such contribution to their home country. Nigeria's underdevelopment is deepened by such erosion of human capital as modern economies are dependent on human capital for its progress.

There is a serious contention about the place of brain drain in the development matrix. While some contend that brain drain undergirds the backwardness of Third World countries especially African countries, others posit that the net-gains from out-migration outweigh the negative effects. Mundende (1989:185-186) Ghosh and Ghosh (2001:40) capture this divergence in what they categorised as nationalist and internationalist approaches. As Ghosh and Ghosh (2001:40) outline:

While to an internationalist, brain migration is a welfare-income-development maximizing natural process, to a nationalist, it is a perverse process leading to loss of income, welfare and development and a widening of international inequality between DCs and LDCs.

The essential nature of brain drain is its unidirectionality, that is, the movement of vital human capital away from less developed countries to developed countries. Such a

movement has mutually reinforcing effects: it creates holes in the human capital formation in the sending country while filling such holes in the receiving country. The loss of such vital human capital naturally has serious implications in the development potentials of a country. And it is even more complex when the country is at the fringes of the global economic, technological, scientific and political system.

There has been a trend of quixotic sophistry in the treatment of brain drain syndrome. There is an argument that the backwardness of developing countries constituted the main cause of brain drain and that rather than brain drain being a hindrance to the prospects of development in the LDCs, it actually helps in resolving contradictions that could have deepened their underdevelopment (Ghosh and Ghosh 2001:4; Mundende 1989:2). But this is farther from the truth. The developed countries have, through a combination of immigration policies, ensured that the right calibre of trained personnel is admitted into their country. The underlying motive for attracting HQM from the LDCs is purely economic. As Mundende (1989:188) rightly observes,

Migration is a selective process confined mainly to persons of certain ages, occupations and education. Skilled manpower is needed to run the wheels of industry and to coordinate development efforts of the economy. Emigration creates vacancies where there should be none, and although the situation may not be critical in all sectors of the economy, it can lead to continuous dependence of developing countries on developed countries for manpower requirements.

In other words, brain drain deepens the dependence of African countries in more complex ways that are, at first, readily appreciated. While the West applauds itself for its foreign aid deployment to Africa which in recent times has been on downward trend, foreign aid suffers capital flight as it finds its way through several cleverly surreptitious channels back to the West or form the indebtedness of these economies. Apart from the importation of virtually all the needs of African economies from the West, the shortfall of human needs in Africa arising from brain drain has cost it a fortune –it is estimated that Africa employs about 150,000 expatriate professionals at a cost of US\$4billion a year (Tebeje 2005).

Neoclassical postulations have tended to underplay the significance of the effect of brain drain on both the actual state of development in developing countries especially Africa and the prospects of development. They contend that head or tail, that the world economy is the beneficiary of brain drain. Their argument centred on the premise that international circulation of human capital based on free choice results in optimisation of individual's

productivity and overall welfare. And that as long as individual migrant's income increases and the income of those left behind does not decrease by the fact of migration that the world is better for it (Sousa 1989:198-200). The flaws associated with the position of neoclassical postulation about brain drain consist in its assumption that the global capitalist system operates a level-playing field where countries operate at the same pedestal. It also confuses the gains of the developed countries as the gains of the entire system thus denying the inequality and division that characterise the modern world system. Bhagwati and Hamed (cited in Sousa 1989:200) have also criticised the neoclassical approach as individualising brain drain "without taking adequate account of the structure within which individual decisions were made and of the relevant interdependence and dynamic effects".

Nigeria occupies the lower rungs on every global index of development. Actually, there is no aspect of development that it is not in deficit. This being so, every brain that leaves its shores not only worsens its development dilemma but also circumscribes its prospects for development. Ghosh and Ghosh's observation that "the outflow of this strategic manpower (brain drain) creates many structural maladjustments and produces enormous negative externalities and thereby retards the process of economic development of the brain-losing country" is true of Nigeria (Ghosh and Ghosh 2001:42).

But many pro-migration scholars deny this by advancing the argument of brain circulation and brain gain (Teson 2008:5). By these concepts they contend that transitional movement of people is a positive phenomenon as it benefits both the developed and developing countries. (Rizvi 2005:175). This implies that the effects of brain drain is *quid pro quo*: there is nothing unfair about brain drain as whatever loss a country experiences by brain drain, it regains through other means, possibly reverse-migration with attendant skills and remittances (Teson 2008:2). But as African economies have demonstrated, brain circulation has been far-fetched and resides outside the orbit of development agenda. The continuous economic crisis besetting African economics, itself a product of a combination of factors rooted in global framework of inequality, makes brain gain and circulation far-fetched.

There cannot be development without human resources. It is human resources that transform the relevant factors of production to achieve development. And if the bulk of trained human capital which Africa requires to propel its development agenda is lost, then development can as well be a mirage. From historical experience, the engine of development revolves around the middle class. It is the middle class that drives development through small and medium-scale industrialisation and taxation base. But the combination of disadvantageous world system and the brain drain syndrome has stalled the prospects of

development in Africa. In contrast, the so-called brain gain in terms of remittances dulls into insignificance in the face of the fact that an African professional working in the United States contributes about US\$150,000 per year to the US economy (Rena 2008).

Statistics have put the volume of yearly human capital loss to Africa at 20,000 skilled professionals. And Nigeria contributes a substantial part of this figure. What this implies is that “every year there are 20,000 fewer people in Africa to deliver key public services, drive economic growth, and articulate calls for greater democracy and development” (Sriskandarajah 2005b). Pro-migration scholars have argued that brain drain helps sending countries to increase its stock of educated people as the international demand would whet more and more people’s desire to acquire education. (Teson 2008:5, Batista, Lacuesta and Vicente 2007:3-4). This is certainly incorrect. Rather than brain drain increasing investment in education and the stock of educated people, it actually decreases growth in the stock of educated people and also threatens the entire education sector. As Adebayo (2010:3) attests, brain drain drained hundreds of thousands of professionals out of Nigeria’s universities, polytechnics, colleges of education, teaching hospitals, and research centres. The impact was such that many of these institutions became hollow and shallow with only 36 percent of the required number of academic staff on the ground. In other words, the capacity of the educational sector to keep up with the required number of students was greatly impaired. Ghosh (2001:41) captures it thus:

Brain drain involves the loss of strategic manpower from key positions. It seriously affects skill formation and involves the loss of money invested in education and training. Needless to say, the loss of strategic manpower adversely affects education, research and training in infrastructure-building, creative talent, present and future technology building, and the entire intellectual climate of the brain-losing country, and it creates a growth-retarding backwash effect

Another aspect is the cost of training these highly skilled personnel. Quoting UNCTAD sources, Rena (2002) informs that one highly trained African migrant between 25 and 35 years, represents a cash value of US\$184,000 at 1997 prices. This represents a cumulative loss of US\$3.68 billion per year to Africa. There is no doubt that there exists an interconnection between brain drain and development. That interconnection does not indicate mutual benefit but rather produces major and residual beneficiaries. Sousa (1989:202) has pointed out that “the gain accruing to developed countries were of three types: ‘opportunity cost’ or saving in investment for training domestic skills required in the absence of migration;

net increases in national output; and the effect of ‘reverse transfer of technology’ ”.

There are many propositional logic portraying positive potentials of brain drain on domestic economies. These propositional logic attribute to brain drain the reverse effect of inducing development in the sending country through such mechanisms as remittances, reverse-migration with attendant financial savings and newly acquired productive skills and diaspora effect resulting in investment and trade (Batista Lacuesta and Vicente 2007:4). The developmental impacts of these factors are assumptive in more ways than one: first, the continued depletion of human resources of African countries created serious distortion that deepened their unattractiveness. Such unattractive economies have repelled rather than attracted the diaspora to make contributions to national development. Second, remittances represent an insignificant portion of a migrant’s earning. IFAD (2007:2) notes that migrants typically send US\$100, 200 and 300 at a time. These amounts constitute an insignificant fraction of the migrant’s earnings. The bulk of the migrants’ earnings are spent in the host countries, thus stimulating the host countries’ economies. In concrete terms therefore, African professionals, for instance, contribute 40 times more to the US economy than to the African economies in the ratio of US\$300 to Africa and US\$12,000 to the US economy (Rena 2008; Emeagwali 2009).

A major reason why scholars point to remittances as being compensatory of brain drain and therefore attribute positive externalities to them is because of their continuous appreciation as well as the comparative edge it has exhibited over ODA and other sources of external financing. In Nigeria, remittance inflows have, since 2002, surpassed ODA by approximately five times (Englama 2007:9). Therefore, the touted positivities of brain drain on the overall development of Nigeria and Africa are marginal. Because the incentives for attracting and retaining Nigerian and other African skilled professionals is mainly economic, there is little chance that a migrant who is profitably employed would return to home country in the form of reverse-migration except forced to do so. And considering that their input to the economies of DCs is enormous, they would be encouraged, even cajoled, to stay put. Reverse-migration therefore involves those professionals whose expertise is not particularly required by the DCs. Those professionals whose skills are critical for African development are rather unreachable as their services are sorely needed in the DCs. As a joint statement by the Network of African Science Academies (NASAC) (2009:1) recognises:

... a sustainable economic future for Africa lies in strengthening the continent’s S and T [Science and Technology] capacity. ... This goal can only be met if Africa

educates and retains a critical mass of world-class scientists and technologists with the knowledge and expertise to address the continent's key scientific, technological and economic problems.

All over the DCs, the key sectors are maintained by the brains drained from Africa and around the Third World. While other parts of the Third World especially such countries as China, India, Mexico, Philippines and so on, have superfluous brain pool that can be referred to as brain overflow (Ghosh 2001:41), Africa is still constrained by inadequate brain pool. For instance, about one third of all African scientists live and work in the DCs. This dire deficit in the optimum number of skilled personnel required to drive African development led NASAC (2009:1) to observe that the level of brain outflow "represents a significant loss of economic potential for the continent, especially in today's global society where scientific and technological knowledge drive development".

There is basically no alternative to high quality human capital in engendering development in national economies. Indeed, sustainable development cannot occur in the absence of a crop of skilled and competent personnel to drive it. The dialectics of brain drain has shown that what Africa can ever hope to get out of its critically relevant skilled personnel that have migrated abroad are remittances and occasional philanthropic gestures as brain drain tends to transmute to "a one-way permanent migration" (Ghosh 2001:41). Remittances on their own cannot replace or compensate for the loss of a country's human capital considering the indispensability and vital role human capital plays as an engine of development. As Emeagwali (2009:2) perceptively observes,

Ask someone who is ill what "wealth" means, and you will get a very different answer than from most other people. ...Money cannot teach your children. Teachers can. Money cannot bring electricity to your home. Engineers can. Money cannot cure sick people. Doctors can. Because it is only a nation's human capital that can be converted into real wealth, that human capital is much more valuable than its financial capital.

The permanence of brain drain in receiving countries is facilitated by socio-economic and cultural integration. Many skilled professionals have not only moved their families but are intertwined in marital associations that have conferred citizenship rights on them. And their patriotic attachment to their new countries seriously dilutes their attachment to their home country. In other words, the post-emigration emotions of migrants are not propelled by

patriotic zeal but pity. It is this feeling of pity that motorises the philanthropic gesture of the African diaspora towards alleviating the pains of poverty etched on the landscape of their countries. But the fact is that alleviating poverty through remittances and philanthropism cannot enthrone development but only deepen dependence especially in the absence of the relevant skilled professionals to drive development.

### **iii) Trends in Nigerian Migration and Brain Drain**

Nigeria is a country characterised by massive immigration and emigration, although its net migration calculation tilts towards emigration (Adedokun 2003; Orozco and Millis 2006; De Haas 2006; Mberu and Pongou 2010). Nigeria is generally challenged by wide-ranging migration issues. The nature of migration in Nigeria takes the form of internal, regional and international. Internal migration connotes the movement of people within a country and is depicted by movement from one location to another, often from rural to urban areas. Other forms of internal migration include rural - rural movement and urban - urban movement. Although movement to such urban cities as Enugu, Onitsha, Kano, Sokoto, Jos, Port Harcourt, Calabar and other major cities in Nigeria account for significant portion of internal migration, major absorbing zones such as Lagos and Abuja account for the bulk of internal migration (Afoloyan et al 2009; Mberu and Pongou 2010). The forces that induce internal migration are multifarious. They range from such push factors as dwindling rural economy (scarcity of land, improvised soil, declining crop yields, poor harvest and soil erosion); poverty, conflicts and environmental, political, religious and cultural factors to pull factors such as organized life in the cities, paid employment, availability of socio-economic and political infrastructures (Nwokocha n.d; Nwajiuba 2005).

Nigerians are also known to have migrated to countries within Africa. Mberu and Pongou (2010) aver that the trend of migration amongst Nigerians in the pre-independence period was mainly regional. Nigerians emigrated to such countries as Ghana, Togo, Cote D'ivoire, Benin Republic (Dahomey), Mali, Burkina Faso (Upper Volta) and Niger. The push and pull factors underpinning these emigrations consisted in the search for greener pastures and lax national immigration policies. The expansions in trade, cash-crop production, infrastructural development and extraction of solid minerals created demands for farmers, workers and middlemen. Another factor was the lax immigration policies then. Between 1901 and 1902, the pull factors that underpinned the emigration of Nigerians to Ghana gold mines offered. The rise in the number of Nigerians who emigrated to Ghana was attributable to

three factors: the gold mines and the economic opportunities they offered; Ghana's robust economy and attendant economic development and the vigorous pan-African movement that took root there. The pool of Nigerian immigrants was such that in 1969, the Ghanaian authorities issued alien expulsion order, which affected about 140,000 Nigerians (Mberu and Pongou 2010). The migration of Nigerians to other parts of Africa, in substantial numbers, outside the traditional West African sub-region was as a result of several factors. Mberu and Pongou (2010) identify such factors as: quest for more business opportunities; socio-cultural ties; and ethno-religious affinities.

The post-independence trends in Nigerian migration could be divided into three phases. The first phase coincided with, and covered, the immediate post-independence period, up to 1980s when economic downturn reversed the ensemble of pull factors in Nigerian emigration patterns. The second phase covered the period 1980s to the 1990s when different types of economic reforms created certain contradictions in the Nigerian economy. The third phase started from 2000 and still subsists. It was spawned by wide-ranging development in the international arena such as globalisation and its advertised advantages as agent of prosperity, economic growth and development; the dismantling of immigration policies in the developed countries; and, actual incentives in developed countries for the repatriation of earnings through the instrumentality of remittances.

The internationalisation of Nigerian migration in substantial stock started in the twilights of Nigeria's colonial rule but expanded in the post-independence period. Apart from the developed countries of Europe and North America, Nigerians increasingly emigrated to African countries such as Sudan, Ghana, Cameroon, Gabon, Botswana and South Africa. (De Haas 2006; Afoloyan et al 2009). The pull factors consisted in the quest for higher academic qualifications to bridge the manpower gaps in the administrative sectors of the Nigerian State. As Mberu and Pongou (2010) put it:

Flows from Nigeria to countries beyond the region did not occur on a large scale until after independence in 1960. From the 1950s through the 1970s, the emerging elites moved mainly to the United Kingdom due to the legacy of colonial ties, for educational pursuit, and in a few cases for administrative matters.

Migration in this era did not constitute brain drain as the Nigerian economy possessed the necessary ingredients of robustness. Most Nigerians who sojourned abroad in the 1960s and 1970s came home after completing their education and were employed by the Nigerian

civil service (at the federal, regional and state government levels) and the burgeoning oil and private sectors of the economy (Mberu and Pongou 2010).

As Nigerians troop abroad, Nigeria is also a target of immigrants. From independence, Nigeria has been “a strong attractive pole for immigrant populations” (Afoloyan et al 2009:48). Available data suggest that the stocks of migrants have been in the upward trend. Quoting the Nigerian Population Commission (NPC) data, Afoloyan et al (2009) show that total migrant stock in Nigeria rose from 101,450 in 1963, 477,135 in 1991, and 751,126 in 2000 to 972,126 in 2005 with projected estimates for 2010 put at 1.1 million people. A closer look at the 1963 and 1991 Nigerian censuses shows that even though the total number of non-African migrants rose from 46,951 in 1963 to 74,534 in 1991, their percentage share had declined from 46.3 percent to 15.6 percent. Currently, there is increasing presence of citizens arriving in Nigeria from ECOWAS countries. The percentage of the migrant stock from ECOWAS countries rose from 63.4 percent in 2001 to 97.5 percent in 2005 (Afoloyan et al 2009). The composition of immigrants include regular immigrants such as refugees/asylum-seekers; labour migrants; students; tourists and visitors; and irregular immigrants such as victims of human trafficking/smuggling and foreigners voluntarily returning home (Afoloyan et al 2009).

While there is agreement amongst scholars that Nigerians constitute a significant African migrant stock, there is sharp disagreement about precise figure of Nigerian migrants. The disagreement emanates from lack of reliable empirical data. Every figure bandied in the literature appears to be a product of arbitrary conjectures and projections. Orozco and Millis (2007:3) argue that official statistics on Nigeria’s emigration are inaccurate and incomplete. This view resonates in Afoloyan et al (2009:56) when they aver that:

Data on emigrant flows are equated with those on the departure of people from Nigeria. Departure data are based on the information supplied on the cards filled out by travelers at the country’s official exit points. Since data on departures were not cross tabulated with the duration of stay, the data generated can serve only as passenger flows... .

Afoloyan et al (2009) do not venture an opinion on the projected stock of Nigerians in the diaspora. While the United Nations based their percentage of Nigerian migrants on 0.7 percent of the population, the World Bank anchored its own estimation on 0.6 percent thus yielding different figures (World Bank 2011: 195; World Statistics Pocket Book 2010:144). Orozco and Millis (2007) estimate that about 3.9 percent of Nigerians, or 5.1 million people

(in 2007 population figure) constituted Nigerian diaspora. While not proffering a rounded figure of Nigerian migrant stock, Hernandez-Coss and Bun (2007) estimate that Nigerians living in the United States alone were in the neighbourhood of 5 million. This figure excluded Nigerian migrants in African countries and other OECD countries. Soludo (2007) contends that about 17 million Nigerians were in the diaspora. Hagher (2011) estimates the stock of Nigerians in the Diaspora to be around 12 million.

Despite the lack of unanimity in the extant literature about the stock of Nigerians in the Diaspora, there is an agreement that substantial portion of Nigeria's professionals are domiciled abroad and that it constitutes brain drain as many of them are highly-skilled (Oni 2000; Nwajiuba 2005; Soludo 2007; De Haas 2006; Hagher 2011). Also, brain drain is associated with two types of negativities: it cripples development of the economy and depletes human resources necessary to undertake developmental mission (Mohamoud 2005; El-Khawas and Ndumbe 2006). The brain drain phenomenon is hinged on the argument of unidirectional movement of highly-skilled professionals and that the overweight of incentives in the developed countries circumscribes the possibilities of return. Brain gain is hinged on the reversibility of these circumstances and that it could be a reality (Hunger 2002).

The reality of brain drain, especially the subsisting domestic and international push and pull factors that spawned it, has moved discourse on it from belligerence and anti-Western polemics to the evolvement of processes for harnessing diaspora potentials (Mohamoud 2005; Nwajiuba 2005). Several factors account for the shift in orientation: the first factor was the paradigmatic reconceptualisation of brain drain as a zero-sum, permanent and irreversible negative phenomenon. It was reconceptualised as a mutually-beneficial brain circulation. Earlier literature focused on ex post effect of the brain drain and investigated its consequences. Its position was that brain drain unambiguously reduced the average level of education and generated loss for those left behind. In contrast, the new literature emphasized the positive impact of skilled migration flows (Docquier, Lohest and Menfouk 2005:3). Experience of several countries such as China, India, Mexico, Philippines amongst others, where the diaspora demonstrably contributed to national developmental efforts helped to drive this reconceptualisation. As noted by UNDP (2007:1).

Drawing from the modernisation theory and dependency theory, this hypothesis predicts the long-term positive effects in the case of (a) direct return or (b) network building process of the emigrated knowledge elite... . Generally, the positive aspects could take such forms as incentives to acquire higher

education, remittances, return migration of skilled professionals, and the creation of business networks.

The second factor was the burgeoning global remittance portfolio and its beneficial effects at the micro and macro economic levels of many states. Three issues heightened interest in the potentials of remittances as an effective development tool. One, it constituted a major source of diaspora engagement in national economies. In 1996, Egypt received US\$2.8 billion, Morocco US\$2.2 billion, Algeria US\$1billion, Nigeria US\$947 million and Tunisia US\$736 million as remittances and this constituted one of their largest sources of foreign exchange inflows (El-Khawas and Ndumbe 2006:96); two, remittances overtook ODA as a source of foreign finance. In 2009, the World Bank sources estimated the total remittances to developing countries at US\$317 billion whereas the OECD figures for net ODA from DAC countries for the same period was US\$199 billion (Judge and De Plaen 2011:2); the three, the effectiveness of remittances in precisely reaching its target recipients or addressing targeted developmental projects.

The third factor that underpinned the paradigmatic shift in the perception of brain drain vis-à-vis national development is the subsistent incapacity of national economies to reverse the push factors that spawned and motorised emigration and the perception that rather than undermine development, that brain gain catalyzes development through the transference of the expertise and acquired knowledge of the diaspora into the domestic arena (Nwajiuba 2005:4).

The fourth factor was the progress made in the expansion of information and communication technologies, which enhanced and facilitated communication between migrants and home countries (Nwajiuba 2005:4).

Nigeria is seemingly a late comer in harnessing and mainstreaming its abundant and highly skilled population into national development framework. But even in the absence of a coherent national framework, the Nigerian diaspora had been active in development by sending remittances and engaging in hometown projects (Van Hear et al 2004). A study by Nwajiuba (2005) focusing on Southeastern region of Nigeria finds that its people are highly migrant, and that the factors that influence their choice of destination include economic, social, education, climactic, and language and that remittances constitute 50 percent of household expenditure. Remittances rose from under US\$2.3 in 2004 to US\$ 6.5billion in 2005 and had been on the rise. In a study by Hernandez-Coss and Bun (2006), focusing on the UK-

Nigeria remittances corridor, they conclude that both recorded and unrecorded remittances to Nigeria must be around US\$ 5 billion.

De Haas (2006:15); Hagher (2011) contend that Nigeria's migration agenda has been the prevention of emigration rather than mainstreaming migration and remittances in its development strategy. According to Afolayan et al (2009:69):

For a long time, the government of Nigeria maintained a laissez-faire attitude towards migration. This was apparent in both the 1988 and 2004 national policy on population, which made casual reference to migration. The 2004 national policy on population, for example, mentions that the Ministry of Internal Affairs collects data on international migration and transmits them to the National Population Commission for analysis; but this is the only reference to migration.

It was only recently that migration and Nigerian Diaspora were factored into the country's development agenda. De Haas (2006); Hagher (2011) attribute the factors that contributed to the new policy direction to formal re-introduction of democracy in 1999; increasing freedom of speech; the success story of other states such as India and China, amongst others in incorporating the diaspora in its development models; the international sanctions against Nigeria and the shuttle diplomacy of former President Obasanjo, which yielded insights into the potentials of the Nigerian diaspora.

The launch of the Presidential Dialogue in 2002 with Nigerians abroad signposted the change in policy orientation towards engaging the diaspora in national development. Nigeria's Poverty Reduction Strategy Papers (PRSP) drew a link between democratisation and economic growth on the one hand and the role of emigrants and donors in national economic development on other hand (De Haas 2006:16). The concrete steps taken by the Nigerian state was the establishment of an organisation named Nigerians in the Diaspora Organisation (NIDO) and the Nigerian National Volunteer Services (NNVS) as well as the creation and appointment of a Special Assistant to the President on Nigerians in the Diaspora (De Haas 2006; African Diaspora Policy Centre 2011; Hagher 2011). The Nigerian government's economic reform document called the National Economic Empowerment and Development Strategy (NEEDS) recognised the potentials of Nigerian diaspora as agent of development and the centrality of appropriate incentives in inducing them to invest at home. It avers,

If appropriate incentives are in place, the brain drain of Nigerians could be turned into a brain gain - through increased

remittances, technology transfer, and even return of capital flight (which could repatriate up to \$2-\$5 billion a year). In other words, there are ample opportunities to jump-start faster growth - if the right strategy can be crafted and implemented (NNPC 2004: 12-13).

According to NNPC (2004), the programme of development under NEEDS for the period 2003-2007 was estimated to cost US \$4.5 billion. The bulk of the money was expected to be sourced from outside Nigeria through overseas development assistance in the form of grants, loans and technical assistance and investments by the Nigerian diaspora. It projected that increasing number of Nigerians in the diaspora was willing to return and contribute to the Nigerian economy and that the efforts of government would be geared towards attracting and inducing both Nigerian and African diasporas to invest in Nigeria (NNPC 2004).

Despite the policy initiatives by the Nigerian state to transform brain drain to brain gain, there is nothing much on the ground to suggest serious progress. African Diaspora Policy Centre (2011:15) attributes the underlying causes to policy reversals and inconsistencies. Other factors have been outlined as follows:

Many of the policy measures on the Diaspora adopted by the various governments appear not to be based on empirical knowledge and research on the complexities of migration and development. As a result, many of the activities that are designed to mainstream the initiatives of the Diaspora into the development process are very good on paper, but translating them into reality through effective implementation has remained difficult to accomplish.

Brain drain has had far-reaching effects on all sectors of the Nigerian economy through the emigration of vital human resources required to power development. Thus, such key areas as health, education, investment, technology development and so on lack the requisite manpower to man them.

Significant economic growth in any country hinges on deliberate investment in its human capital. Otu and Adenuga (2006:2) contend that no country has achieved sustained economic development without substantial investment in human capital. Human capital, therefore, is at the epicentre of national economic growth and development. As observed by Otu and Adenuga (2006:2-3):

People are assets - in fact, a country's most valuable assets. It is essential for human development that these assets be deployed sensibly. A defective incentive system can result in a waste of

human resources and often, too, in a higher incidence of poverty and greater inequality in the distribution of income. It is not enough to use existing resources wisely, we must also add to the existing resources through human capital formation.

Human capital formation is characterised by the enhancement of people's skills, knowledge, productivity, creativity and inventiveness. These factors, aforementioned, assist the people, indeed empower them to identify their own priorities and implement programmes and projects of direct benefit to them and the country. The collective deployment of the people's potentials translates to economic growth and development. The development trajectories of Southeast Asian countries bear testimonies to the indispensability of human capital development in railroading the economy onto the tracks of development. As Balaam and Veseth (2005:342) note:

The combined impact of investment strategies in education and job training in the NICs [newly industrializing countries] has resulted in a quality labour force, creating increased economic efficiency, industrial flexibility, and greater economic equality. Government initiatives in reducing the illiteracy rate and providing adequate access to job training are evident in comparatively high enrolment rates and government investment in creating an educated and skilled workforce. The important point here is not that government expenditures on education have resulted in economic development. Rather, in a number of NICs, the emphasis on education has led to the growth of literate and skilled work force, which has been essential to the success of the industrial and investment policies and has promoted growth in productivity.

Nigeria did not seem to have evolved a framework for the harnessing of its human capital. The exemplification of this was the dearth of policies concerned with deliberate and sustained human capital development. Otu and Adenuga (2006) contend that planning in Nigeria was devoid of official consideration of the importance of human capital in the development process. What preoccupied planners was the accumulation of physical capital for rapid growth and development. But capital alone cannot transform a society. Soyode (1983) opines that even where capital is adequate, the absence of adequate supply of manpower leads to stunted development. The mindset of Nigerian development planners, prior to and in the years following independence in 1960, was that a major inhibitor to Nigeria's economic development was dearth of capital. Therefore efforts were geared towards tackling capital shortage which was identified as the major constraint to

development. Soyode (1983:48) observes that “when machines and equipment have been put together to facilitate a process, the productive capacity is ‘enfeebled’ when there is shortage of personnel to execute plans, use, maintain and repair equipment and machinery, as well as shortage of supervisory staff”.

With the exponential upsurge in Nigeria’s earning from the “oil boom” in the 1970s, capital was no longer the issue. According to Soyode (1983), the development objectives of the various regimes could not be achieved because of inadequate manpower whose competencies were doubtful. Lack of adequate local manpower to meet the development challenges in the 1970s and 1980s was evident in the preponderance of expatriates in the different projects that were executed in the country then. Soyode (1983) observes that expatriates accounted for 40 percent of technical officers and 100 percent of engineering corps in the construction of Kaduna Township Road projects. Similar dominance of expatriates in projects all over the country was recorded. As Soyode (1983:49) put it, “in short, in the construction of roads and bridges, Nigerians dominate the unskilled labour and artisan grades of manpower while expatriates dominate the engineering corps and form a substantial proportion of the technical officers”.

A country which is desirous of developing must have an appropriate mix of manpower from high-level to low-level and anything in-between. Harbison appreciated this when he states that:

... a country which is unable to develop its human resources, cannot build anything else whether it be a modern political system, a sense of national unity or a prosperous economy, where there is disagreement is where the emphasis should be placed: widespread literacy; high-level manpower; or middle-level manpower or the appropriate mix (cited in Soyode 1983:49).

Most countries pursue a simultaneous development of all classes of labour in order to meet the demands of wide spectrum developmental objectives. The Nigerian government through the Third Development Plan (1975-80) embarked on massive education and manpower development. Usoro (1983:141) chronicles it thus:

The rate of progress made in education within the last two decades remains one of the most outstanding since independence. In primary, secondary, technical, teacher training and university level education the incredible surge in the number of institutions established and in enrolment illustrates the desire of successive administrations to satisfy the

nation's yearning for qualified manpower in various fields of learning.

There was astronomical surge in the number of schools as well as enrolment (Usoro 1983; Otu and Adenuga 2006). The Nigerian Government introduced the universal primary education (UPE) in 1976 which positively affected primary education in terms of enrolment and number of schools. For instance, the number of primary schools rose from 21,223 in 1975/76 to 37,467 in 1979/80. Also enrolment shot up from 5 million to 12 million during the same period (Usoro 1983). There was also a multiplier effect on both post-primary and tertiary education: for tertiary institutions, the number rose from two in 1960 to thirteen in 1980 and so was the enrolment which rose from a little over 400 to over 57,000 students in 1980 (Usoro 1983; Otu and Adenuga 2006). Since then there has been a continuous increment in both the number of schools and enrolment statistics. As at 2004 there were 65,627 primary schools, 13,333 post-primary schools and 215 tertiary institutions covering polytechnics, colleges of technology, colleges of education and universities in Nigeria. For enrolment, about 2.8 million pupils were in primary schools, 7 million in post-primary schools and 6.7 million in the tertiary institutions (Otu and Adenuga 2006).

The development need in Nigeria was such that the manpower development embarked upon by the different levels of educational institutions was immediately mopped up by the economy. As Balogun et al (2003:222) opine, "in the 1960s and 1970s, the Nigerian economy provided jobs for its teeming population and absorbed considerable imported labour in the scientific sectors. The wage rate compared favourably with international standards and there was relative industrial peace in most industry sub-groups".

A corollary to this state of affairs was that very few people were below the poverty line as the Nigerian economy was robustly productive resulting in the agricultural, industrial and public sectors absorbing most of the labour force. However, from the late 1970s and early 1980s, the Nigerian economy began to have problems which made it impossible for it to continue to provide for its teeming population. The forces that underpinned the reversal in Nigeria's economy were both internal and international. The internal forces included: a combination of poor domestic economic policies, corrupt leadership, monocultural economic base, and deteriorating external terms of trade (World Bank 1995:26; Shah 2001). The international forces have been identified to include: the oil shocks, world economic recession, deteriorating terms of global trade, debt overhang and macroeconomic imbalances and

skewed international economic system (CBN Research Department 2003; Spero 1977:148-149; Nweke 1985:1-19; De Vries 1987:208; Payer 1989:7-16; Toyo 2002:527).

The response of the Nigerian government to the deteriorating economic situation was introduction of a bouquet of economic reforms, notably, the Structural Adjustment Programme (SAP) and its conditionalities (Economic and Statistical Review 1996: 1; Offiong 2001:232-233). Balogun et al (2003) trace the precipitating factor to the manpower crisis in Nigeria to SAP especially the implementation of currency devaluation. As they put it:

A major consequence of the rapid depreciation of the naira was the sharp rise in the general price level, leading to a significant decline in real wages. The low wage in turn fuelled a weakening purchasing power of wage earners and declining aggregate demand. Consequently, industries started to accumulate unintended inventories and, as rational economic agents, the manufacturing firms started to rationalize their workforce. In the public sector, an embargo was placed on employment... (Balogun et al 2003:222-223).

SAP had far-reaching effect on every aspect of the Nigerian system as it represented a watershed in human capital deterioration in Nigeria. The institutions involved in human capital development were sucked into the eddy of crisis that enveloped the government. With dwindling resources, government could not meet the obligations of funding. The effect of this economic crisis was overwhelmingly negative. Yaqub (2007:2) notes, “the consequence of this development led to the beginning of the worst aspects of the phenomenon of brain drain whose impact has been with the universities... .”

The health sector was amongst the sectors worst hit by the unabated depletion of Nigeria’s high quality human resources. Nigerian health professionals, in deference to the SAP-instigated contractions in the economy left the country in droves. The beneficiaries of this human capital flight out of Nigeria were the developed countries and the oil-rich states of the Middle East (Mbanefoh 2007:4). And, of course, the losers are the Nigerian people who are denied the services of these professionals. The Nigerian predicament is representative of the African predicament in terms of dearth of health professionals because of their mass emigration to the developed countries. As Mbanefoh (2007:3) observes,

... the health status of the continent has been low compared to other continents of the world. For instance, going by the recommendation of the World Health Organization (WHO) of one doctor per a population of 5,000 people, about 10 Africa (sic) countries have one doctor to 30,000 or more people.

The Nigerian scenario is not any better considering the strong current of its migratory flows. The depletion of the stock of Nigeria's health professionals even affected the capacity of Nigeria's health institutions to produce qualified health personnel. In the University College Hospital (UCH) Ibadan, the Department of Surgery which had, prior to that time, 23 lecturers and consultants in 1984 was left with only five by April 1989 and consequently student intake fell from 279 to 124 in the corresponding period (Mbanefoh 2007:4).

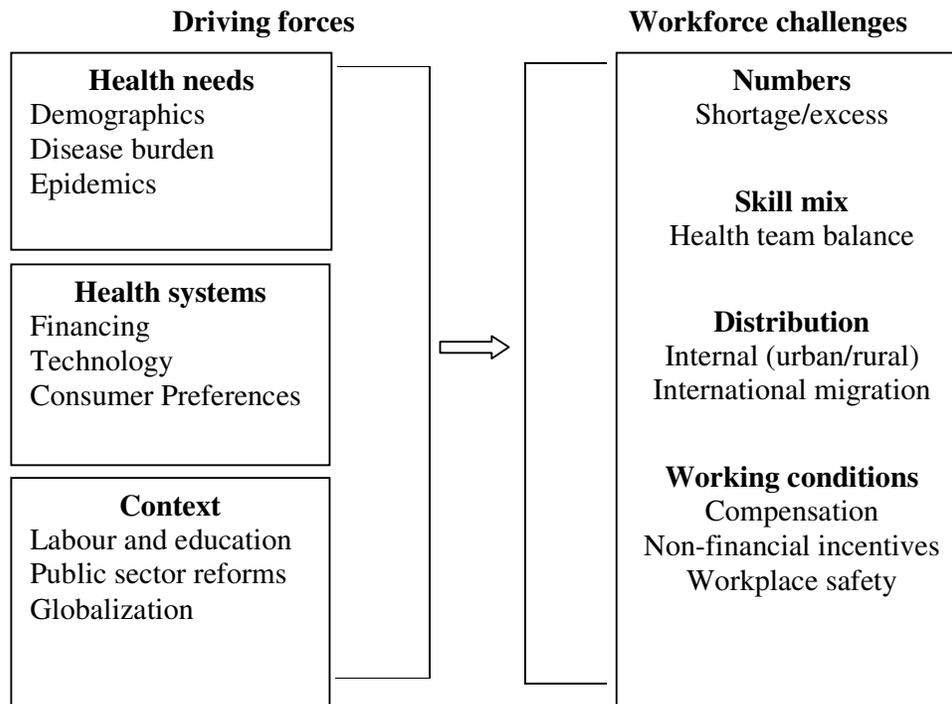
The state of Nigeria's health sector is dismal. Nigeria is listed among 36 African countries categorised as having critical shortage of human service providers for efficient health care delivery (World Health Report 2006:12-13; <http://www.who.int/workforcealliance/countries/57crisiscountries.pdf>). The dismalness is exemplified by health indices. As Uneke et al (2008) have pointed out, "life expectancy dropped from 53.8 for females and 52.6 years for males in 1991 to 48.2 years for female and 46.8 for males in 2000. Both the infant mortality (IMR) and maternal mortality rate (MMR) represented one of the highest around the world: while the IMR rose from 87.2 per 1000 live births in 1990 to 105 in 1999; the MMR was 800 per 100,000 prompting the World Health Report of 2000, to rank the country 187 in the world. Uneke et al (2008) attribute the sorry state of Nigeria's health care delivery system to acute shortage of health professionals. Yahya (2006:23) contends that:

In the case of Nigeria's health sector, recurrent expenditure for the payment of salaries, consumables such as medicines and disposable materials and the maintenance of health facilities and equipment were drastically reduced as a result of low allocations... . Corrupt practices continue to erode the quality of primary health care, amongst other important public services. This general decline in primary health care systems has had a number of impacts on Nigeria's capacity to sustain immunization services.

Uneke et al (2008) also identify factors driving human resource challenges in the health sector as comprising: (a) insufficiently resourced and neglected health systems; (b) poor human resources planning and management practices and structures; (c) unsatisfactory working conditions characterised by heavy workloads, lack of professional autonomy, poor supervision and support, long working hours, unsafe workplaces, inadequate career structure, poor remuneration package, poor access to needed supplies, tools and information and limited or no access to professional development opportunities; (d) internal and international

migration of health workers. World Health Report (2006:xvii) schematically represents the forces that drive health care thus:

**Figure 1: Forces Driving the Workforce**



Source: *World Health Report* 2006:xvii

The overall effect is the rolling back of previous gains made in the health sector as these various factors act as push factors that drive Nigeria’s qualified health personnel into the embrace of the developing countries’ health system (Yahya 2006:23). The inequality that characterises the modern world system is reflected in the distribution of health workers as well as the nature of health care delivery system in the developed and developing countries. As the World Health Report (2006:8) captures it: “health workers are distributed unevenly. Countries with the lowest relative need have the highest numbers of health workers, while those with the greatest burden of diseases must make do with a much smaller health workforce”. This is a product of brain drain and the implication is that the health crisis that characterises developing countries especially African countries will continue to exacerbate as long as there is brain drain. Anekwe (2003) considers brain drain a worrisome phenomenon as it erodes university-educated manpower which constitutes the engine room of the economy. Considering the pervasive poverty and health crisis in Nigeria, remittances cannot

stand in for lost human capital which is critical for quality healthcare delivery. The effect of lost human capital has been captured by Newsday Editorial in the following words:

If you consider that poor Africa with 1/7 of the world population has about 28 percent of the global disease burden and yet it has just a mere 1.3 percent of the total world health force to cope with this huge burden, then it is not surprising that the continent is the sickest place in the whole world... . The result is that every year, millions of Africans, especially children die from diseases that elsewhere have long been brought under control ([www.nasarawastate.org/newsday/news/nasara08/NewArticle242.html](http://www.nasarawastate.org/newsday/news/nasara08/NewArticle242.html))

It is estimated that the percentage increase required by African countries to shore up its stock of health workers (estimated to be 590,198 as at 2006) was 139 percent (World Health Report 2006:13). Shoring up the health worker needs of Nigeria is not a simple matter as it involves two issues: one, enormous capital outlays that are simply unavailable; and two, continued pressures from the developed countries for health professionals. The internal needs of the UK National Health Service for expansion have maintained opportunities which poorly paid and unmotivated professional health workers from Nigeria and elsewhere in Africa find irresistible (De Haas 2006). For the capital outlay needed to provide the requisite manpower for the health sector, World Health Report (2006:13) avers:

Making up the shortfall through training requires a significant investment. Assuming very rapid scaling up in which all the training is completed by 2015, the annual training costs range from a low of US\$ 1.6 million per country per year to almost US\$ 2 billion in a large country like India. ... Financing it would require health expenditures to increase by US\$ 2.80 per person annually in the average country... .

The strong resurgence in the incidence of communicable and non-communicable diseases such as tuberculosis and malaria as well as the seemingly intractable HIV/AIDS epidemic has increased the burden of diseases on the healthcare delivery system of Nigeria and other African countries. Dovlo (2004:2) contends that the economic difficulties of the countries in sub-Saharan Africa which manifest in low funding and consequent deterioration of health infrastructure laid the foundation for the negativities that characterise the healthcare delivery system. One of such effects was the erosion of the gains made earlier in terms of

rolling back diseases as exemplified by reduction in life expectancy in seventeen out of forty eight countries in sub-Saharan Africa between 1981 and 1999 (Dovlo 2004:2).

Despite the recognition of the acute manpower crisis in Nigeria's health sector and that of other African states, the developed countries have continued to suck available trained health professionals out of Africa to satisfy their immediate and future needs. The loss to Nigeria is gain to the developed countries. For instance, while the erosion of Nigeria's qualified health professionals created distortions that engendered crisis in the health sector, including low life expectancy, the infusion of foreign doctors in the developed countries strengthened their health sector and thus translated to higher life expectancy. The contrast speaks volumes: in 2003, Nigeria with a population of 122.8 million had 34,923 doctors and 127, 580 nurses while the UK with a population of 58.8 million had 133,641 physicians and 704, 332 nurses in 1997 (Nnamuchi 2007:23). It was estimated that England alone would need 25,000 more doctors by 2008 than it did in 1997 (Dovlo 2004:6). This projection implies that there is no likely abatement in the brain drain of health professionals in the short- or medium-run. In 2003, 1,248 Nigerian doctors were granted full registration with additional 324 and 350 doctors granted specialist and limited registration rights respectively. Also in 2002, 1,501 work permits were issued to Nigerian nurses (Dovlo 2004:7).

Two paradoxes appear to characterise Nigeria's health sector: Nigeria increases its total health expenditure (THE) to boost both human and infrastructural facilities in its health sector only for these trained personnel to be lured out to service developed countries' health sector. ODA from the developed countries to African economies surreptitiously reverts back to them through payment of salaries to their experts for technical assistance. Quoting World Bank sources, Emeagwali (2009:3) informs that in a particular year while 70,000 skilled Africans emigrated, about 100,000 skilled expatriates were brought in as replacement with emoluments higher than both prevailing local and international rates. The sustained depletion of health professionals created craters that spawned crisis in their health sector. To bridge these craters and resolve the health crisis, it was contended that increased financing was required (World Health Report 2006:13). Both the OECD and African countries have striven to increase their ODA and total health expenditure respectively. As the Global Fund (2010:4) elaborates:

In the last decade, total net official development assistance from the OECD/DAC countries has been increasing. Official development assistance flows reached their highest level ever at US\$ 121.5 billion in 2008, representing 0.31 percent of

members' combined gross national income (GNI). This was a significant increase of over 126 percent from the \$53.7 billion (representing 0.22 percent of GNI) provided in 2000.

Also Nigeria's THE has been on the increase: it rose from N157.081 million in 1998 to N976.687 million in 2005 (NHA 2005:26; 2009:16). But it would appear that the accruing benefits in the increment of the funding of the health sector ultimately serve the interest of the developed countries as Africa, especially Nigeria serves as their feeder zone. As Emeagwali (2009:2-3) contends, "because a significant percentage of African doctors and nurses practice in US hospitals, we can reasonably conclude that African medical schools serve American people and not African people.

THE comprises the total funding in the health sector. Health funding in Nigeria involves the government (Federal, State and Local Governments), health insurance (social and private), external funding and private out-of-pocket spending (AHWO 2008:20). Healthcare funding covers curative, preventive and rehabilitative services. The three tiers of government (that is, the Federal, State and Local Government) handle different layers of the healthcare delivery system even though there could be an overlap. This is so because health is on the concurrent list of the Nigerian Constitution. As such, "each level of Government budgets for its own responsibility of health care service delivery. The Federal Government handles tertiary health care services, the State Governments handle secondary health care services, and the Local Governments handle primary health care services delivery" (AHWO 2008:20).

The core global initiative for development which is the Millennium Development Goals (MDGs) framework has three major healthcare issues as its cardinal objectives. The MDGs denote international framework for development which was evolved by world leaders to address the development challenges of the developing countries. The MDGs framework consists of eight goals, the achievement of which would translate to development. These goals are:

- i) Eradicate extreme poverty and hunger;
- ii) Achieve universal primary education;
- iii) Promote gender equality and empower women;
- iv) Reduce child mortality;
- v) Improve maternal health;
- vi) Combat HIV/AIDS, malaria and other diseases;
- vii) Ensure environmental sustainability;

viii) Develop a global partnership for development (World Development Report 2004:2).

Goals 4, 5 and 6 which deal with the reduction of child mortality, the improvement of maternal health and the combating of AIDS, malaria and other diseases respectively have proved difficult to actualise by Nigeria since the commencement of the implementation of MDGs in Nigeria in 2000 (Abani, Igbuzor and Moru 2005:237). The data in all the health-related goals show either stagnancy or worsening conditions. Since 2004, Nigerian government has been evaluating progress in the trajectory of the MDGs in the country. The midpoint evaluation of the progress of Nigeria towards the actualisation of MDGs showed deterioration in the infant mortality rate which actually rose from 81 per 1000 live births in year 2000 to 110 per 1000 live births in 2005/2006 which is farther away from the global target of 30 per 1000 live births in 2015. Under-five mortality rate also increased from 184 per 1000 live births in 2000 to 201 per 1000 live births in 2007 (FGN 2008:7-8). The same fate enveloped the goal of improving maternal health as “approximately two thirds of all Nigerian women and three quarters of rural women deliver outside of health facilities and without medically-skilled attendants present” (FGN 2008:9). Despite progress recorded in combating HIV/AIDS, malaria, tuberculosis and other diseases, the prospect of meeting the 2015 MDGs targets is categorised as slow (FGN 2008:84-85). Emeagwali (2009) attributes the crisis in the health sector of African countries to brain drain of health professionals. Contrary to the position of pro-migration scholars about the compensatory role of remittances, Emeagwali (2009:2) contends that money alone cannot eliminate poverty or bring about good health or heal the sick in the absence of qualified health professionals. The erosion of qualified health professionals from developing countries is not only akin to perverse subsidy but also depicts fatal flows that enfeeble the health system as well as threaten the corporate survival of the entire system (World Health Report 2006:101). Schrecker and Labonte (2004:410) contend that:

... the costs of health professionals’ emigration are far greater than just the direct costs of their training; they also include the reduced ability of health systems in the country of origin to deliver services and reductions in training and research capacity, both of which undermine long-term domestic economic and social development.

Nigeria is estimated to have the largest stocks of health professionals and only comparable to Egypt and South Africa. AHWO (2008:21) informs that “in 2005, there were

about 39,210 doctors and 124,629 nurses registered in the country, which translates into about 39 doctors and 124 nurses per 100,000 population as compared to the Sub-Saharan African average of 15 doctors and 72 nurses per 100,000 population". As it is, Nigeria's reputed large stocks of qualified health professionals tend to serve the developed countries than its own domestic healthcare challenges. Yahya (2006:23-24) avers that Nigeria's vaccination schedule against polio, tetanus, pertussis (whooping cough), tuberculosis, measles, cerebro-spinal meningitis, diphtheria, hepatitis-B and yellow fever has not been effective: up to 200,000 children die each year from vaccine-preventable diseases. It was part of the bid to narrow the figure that led to the recruitment of child-vaccinators to assist in the administration of oral polio vaccine (OPV) in Bauchi, Kaduna and Kano states. According to the World Health Report (2006:99):

It appears that doctors trained in sub-Saharan Africa and working in OECD countries represent close to one quarter (23%) of the current doctor workforce in those source countries, ranging from as low as 3% in Cameroon to as high as 37% in South Africa. Nurses and midwives trained in sub-Saharan Africa and working in OECD countries represent one twentieth (5%) of the current workforce but with an extremely wide range from as low as 0.1% in Uganda to as high as 34% in Zimbabwe.

Nigeria's health policy is embodied in the National Health Policy and Strategy to Achieve Health for All Nigerians which was introduced in 1988 and revised in 2004. The National Health Policy (NHP) envisaged to address holistically, the challenges that inhibit quality healthcare delivery. Lambo (2004:iv) describes it as representing:

the collective will of the governments and people of this country to provide a comprehensive health care system that is based on primary health care. It describes the goals, structure, strategy and policy direction of the health care delivery system in Nigeria. It defines the roles and responsibilities of the three tiers of government without neglecting the non-governmental actors. Its long-term goal is to provide the entire population with adequate access not only to primary health care but also to secondary and tertiary services through a well-functioning referral system.

As elaborate, detailed and updated as the Revised National Health Policy 2004 was, it did not properly recognise brain drain as a cardinal problem and major cause of health crisis

in Nigeria. Brain drain featured only twice in the document and was only mentioned in the following connection:

- i) Recruitment agencies for health services in other countries shall register with the Federal Ministry of Health (FMOH) and operate within the provisions of the memoranda of understanding with the FMOH; [and],
- ii) The Ministries of Health shall create and sustain a conducive working environment for the motivation and retention of human resources for health care delivery, while deliberate efforts shall be made to offer additional incentives to encourage skilled Nigerians working abroad to return and take up employment in Nigeria's National Health Care System (The Revised National Health policy 2004:20).

Nnamuchi (2007:6) recognises that despite lofty government policies to revamp Nigeria's health sector in terms of primary health care (PHC) initiative, national health Insurance Scheme (NHIS) and international fund schemes such as the US\$131 million Dutch Insurance Health Fund (IHF), the realisation of healthcare delivery goals is hampered by lack of coordinated response to critical health sector needs. What this implies is that efficient healthcare system is dependent on the availability of qualified personnel to drive both the process and the system. The basis for the position of the revised National Health policy (2004:20) with regard to the place of brain drain in the health sector crisis is flawed and this flawed understanding underpinned its lack of strategy to contain it. Contrary to the assumption that the recruitment of Nigerian health professionals would be carried out through recruitment agencies and host country governments, recruitment was often facilitated through personal contacts and lotteries organised by the developed countries thus circumventing institutional requirements for brain drain. Nnamuchi (2007:22-23) observes that "this is hardly surprising as there is no incentive for these countries to toe the government line".

One of the major expectations of brain drain is the possibility of reverse-migration with attendant influx of foreign capital as well as diaspora-led investment initiatives. This mindset informed the delineation of the diaspora as a reserved army of opportunities. As Soludo (2006) contends,

It is estimated that about 17 million Nigerians are in Diaspora, and currently remit about US\$4 billion in remittances per annum. It is also estimated that there are tens of billions of dollars of Nigerians' wealth abroad. If we recall that about 50

percent of the FDI inflows into China in the last two decades was actually from ethnic Chinese in Diaspora, it could be appreciated what the potentials hold for Nigeria.

Foreign direct investment (FDI) refers to investments made to create enterprises abroad or acquire substantial stakes in existing enterprises by foreign owners outside their countries. Aremu (2005:2) argues that:

As the internationalization of production and consumption becomes a prominent feature of today's global economy due to the TNCs' [Transnational corporations] global operations, more firms than ever (in more industries and in more countries) are networking their economic activities in the form of FDI.

In the 1960s and 1970s, there was considerable reservation and mistrust on the part of governments of many developing countries about the importance of FDI in their overall economic development programme (Khor 2001). This distrust was fuelled by the fear that foreign capital would be used for the exploitation rather than for the development of the newly independent countries of the world thereby converting them to neo-colonial states (Nkrumah 1968). But starting from the 1980s there was a significant shift of perspectives in many developing countries towards FDI. Three factors are identifiable as spawning this shift: the economic crisis that engulfed the majority of these countries including Nigeria; the debilitating external debt; and the growing importance of the International Monetary Fund (IMF) and World Bank with their orthodoxy on ingredients of economic development. As noted by Khor (2001), the favourable disposition of developing countries to FDI was swayed by a new orthodoxy which held that as a form of foreign capital FDI is superior to loans because rather than land the host country in a debt crisis it would serve as a panacea for removing obstacles to development.

In sundry reform packages designed for Third World countries by the International Financial Institutions (IFIs), FDI has been particularly identified as vitally important. Indeed, it is eulogized as a necessary condition for economic growth and development (Yakub 2003). It is assumed that it facilitates transfer of financial resources for investment in the domestic economy and enhances the acquisition of modern technology, managerial skills and efficiency in production and distribution (Ebijemito et al 2004; Oyeranti 2003; Englama et al 2004; Aremu 2005; Borensztein et al 1998).

Yauri (2006) has attributed the unpredictability of autonomous FDI flows as a major difficulty in identifying, with any degree of specificity, the determinants of FDI flows. But

Banga (2003); Yauri (2006) identify such economic fundamentals as large market size, low labour cost and high productivity, availability of high skill levels, lower external debt and the extent or state of electricity, openness of the host country, political risks and social factors in the economy as being at the heart of considerations for FDI inflows.

Yauri (2006) distinguishes between market-oriented and non-market seeking FDI. The difference between these two forms of FDI has been provided by Asiedu (2002). The main objective of market-seeking FDI is essentially to serve domestic markets. In other words, goods are produced in the host country and sold in the local market. Therefore, this type of FDI is driven by domestic demand such as large market and high income in the host country. Non-market seeking FDI, on the other hand, is characterised by the tendency of goods (intermediate and finished) to be produced in the host country but sold abroad (Asiedu 2002).

Ebajemito et al (2004) in their study of the FDI scenario in Nigeria identify high production costs, inadequate infrastructure, financial sector distress and pervasive corruption, high rate of crime, spiralling inflation, political instability and macroeconomic imbalances as the underlying hindrances to the influx of FDIs. They, therefore, recommend the pursuit of strong macroeconomic policies, which will incorporate the eradication of corruption, the improvement of infrastructure and the support and promotion of regional integration as strategies to strengthen the investment level of Nigeria. The diaspora was not factored into the equation at all in this work.

The relevance of the diaspora in the overall argument about economic growth and development is most obvious in the disagreement amongst scholars about the real place of FDI as a mechanism for economic growth and development. The neo-classical scholars have argued that resource gaps in the economies of developing countries are at the base of their growth and development crisis. As panacea, they see FDI as possessing the necessary ingredients to wipe off these gaps and engender growth (Yauri 2006).

FDI is essentially perceived as a way of filling in gaps between domestically available supplies of savings, foreign exchange, government revenue, technology and management skills, and the planned levels of these resources necessary to achieve developmental targets (Todaro 1981). A necessary consequence of FDI which has been identified by scholars as its high point is the combination of managerial ability, technical personnel and knowhow, administrative organization and innovation in products and production techniques which FDI presumably brings to the host country (Meier 1984; Odife 1989).

The study carried out by Docquier and Lodigiani (2006) hold that skilled migration stimulates aggregate FDI inflows in the origin country. According to Docquier (2006), these FDI inflows are achieved through reverse-migration: through the instrumentality of knowledge and financial capital, migrants' efforts generate beneficial effects on productivity and technology diffusion. As the World Bank (2006:71) affirms, "industrial parks helped to lure entrepreneurs back to China. In Taiwan (China), the Hsinchu Industrial Park attracted more than 5,000 returning scientists in 2000 alone".

The negative perception of Multinational Corporations (MNCs) and FDI especially the belief that these developmental agencies merely perpetuate the dependency relationship between developing and developed countries has dictated the slant of Third World scholarship about the best combination of strategies for Third World development. With regards to actual trends in FDI, Asobie (2007) has demonstrated that profit is the motivating factor and this is often earned through exploitative means such as detrimental equity share arrangement, obsolete technology and illegal repatriation of capital through over-invoicing. While not dismissing FDI, Asobie (2007) counsels that as basis for FDI, democratic ethos reflective of interests and desires of the vast majority of the populace should be the principal consideration. Coupled with this are proper schooling of negotiators with intending investors or MNCs on the overriding interests of the state, improvement of bargaining strategies and embarking on sustained efforts at methodically studying and initiating the production of modern industrial machines and equipment. A study by De Backer and Sleuwaegen (2003) confirms the "crowding out" effect of FDI on local entrepreneurship as well as the discouragement of the entry of new local entrepreneurs.

Ratha, Mohapatra and Plaza (2008) recognise that official aid alone can never be adequate for funding efforts to accelerate economic growth, poverty alleviation and other MDGs in Africa. The private sources of finance are very important in shaping the trajectory of state development. As they contend:

Ultimately the private sector will need to be the engine of growth and employment generation, and official aid efforts must catalyze innovation financing solutions for the private sector. It is important to stress that financing MDGs would require increasing the investment rate above the domestic saving rate, and bridging the financing gap with additional financing from abroad (Ratha, Mohapatra and Plaza 2008:2).

Beyond official and other traditional sources of external financing, there has been emphasis on the remittances from migrants. Remittances are regarded as veritable source of external financing owing to their continued percentage appreciation in overall framework of external financing. Indeed, Russell et al (1990) suggest that labour emigration and remittances from abroad have become increasingly crucial to the survival of communities in many developing countries as they not only satisfy subsistence needs but also bring increased investments, transfer of technology, skills and entrepreneurship. Generally, remittances to the developing countries have been on the increase. Workers' remittances especially to Sub-Saharan Africa more than doubled from US\$4.6 billion in 2000 to US\$10.3 billion in 2006 (Ratha, Mohapatra and Plaza 2003).

Since the 1980s the Nigerian economy has been characterised by major contradictions. These contradictions created the fodder upon which several reform packages fed. The structural adjustment programme (SAP) which was the most detailed and pervasive of the reform packages envisaged to boost the Nigerian economy by attracting FDI. Through a combination of strategies especially the devaluation of the Nigerian currency, it was hoped that the floodgate of FDI would be opened. Toyo (2002); Nwozor (2005) contend that the promise of unprecedented influx of FDI by SAP was essentially hyperbolic as the subsisting contradictions in the economy which SAP was unable to resolve constituted an albatross to international confidence which was necessary for FDI inflows. SAP deepened the economic woes of Nigeria and successive regimes grappled with its fallouts. Economic and Statistical Review (1996) avers that since the introduction of SAP in 1986, the Nigerian economy has witnessed many challenging macroeconomic problems, among which were rapidly deteriorating value of the Naira, high and negative rate of interest, high rate of inflation and fiscal imbalance.

The vestiges of the failure of SAP and its FDI promise were still evident in the Nigerian economy when Nigeria returned to democratic rule in 1999. The Obasanjo government acknowledged the enormity of the socio-economic and political challenges facing the nation thus:

... [we] inherited an economy with the following characteristics: declining capacity utilization in the real sector, poor performance of major infrastructural facilities, large budget deficit, rising level of unemployment and inflation. In addition, the economy had grave problems of import dependence, reliance in a single commodity (oil), weak industrial base, low level of agricultural production, weak

private sector, high external debt overhang, inefficient public utilities, low quality social services and an unacceptable rate of unemployment (Federal Ministry of Information, Nigeria Returns to Democracy 2000:128).

Nigeria subscribes to the tenets of the Washington Consensus especially the liberalisation of inflows of FDI. Aremu (2005: 6-7) captures it thus, “Nigeria, like many other developing countries, has over the years been compelled to liberalise her financial and investment markets in line with the Ten Commandments of Washington Consensus with the hope that it will enhance sizeable amount of private capital inflow”. The economic reform formulated by the Obasanjo administration (1999-2007) to address both the macroeconomic instability and the developmental challenges of Nigeria code-named NEEDS (National Economic Empowerment and Development Strategy) laid serious emphasis on FDI. The four-pronged strategies of NEEDS are anchored on: reforming government and institutions; growing the private sector; implementing a social charter and value re-orientation (CBN Briefs 2004-2005). Nigeria’s PRSP, a precursor to NEEDS estimated that more than 2 million Nigerians, mostly highly educated have emigrated to Europe and the US (NNPC 2004). The recent trend in the volume of remittance inflows which rose to US\$2.26 billion in 2004 created interest amongst policy makers about the relevance of diaspora remittances in the overall developmental framework of Nigeria especially considering that ODA had been on the downward trend since 2002 (Hernandez-Coss and Bun 2007:38).

Essentially, political change towards democratization appeared to have spawned the policy shift that viewed international migration positively. De Haas (2006:16) points out that:

The launch of the “presidential dialogue with Nigerians abroad” in 2002 marked this shift in policies. The presidential dialogue aims at incorporating the Nigerian Diaspora in national development policies. This also coincides with the stated willingness among the government to establish and reinforce links with Nigerian migrants as well as the numerous associations they have established abroad.

Before this new policy thrust, international migration was a non-issue in Nigerian politics and no connection was made between migration and national development strategies in any form in the myriad policies on national development (De Haas 2006). The recognition of the importance of remittances led to the liberalisation of Nigeria’s financial market, thus making it possible to open foreign currency denominated accounts and the relaxation of rules in foreign exchange trade (Tomori and Adebisi 2007).

Balaam and Veseth (2005) point out that diaspora networks have become an important agent in national development. Diaspora networks in high emigration countries have made great impact on national development - ranging from economic contributions in terms of diaspora investment; involvement in domestic political power contest like Mexico to financing civil war like in Sri Lanka and sundry terrorist sponsorships. Chinese diaspora has been exemplary in their involvement in state development. Balaam and Veseth (2005:371) note that:

One of the chief beneficiaries of Chinese diaspora network connections is China itself. During the period of strong communist control of the Chinese economy, the focus of the diaspora network was on creating connections and opportunities for Chinese migrants outside of mainland China. As China has adopted more market-based economic reforms, however, a reverse flow of funds has been channelled through the diaspora network. Perhaps as much as 15 percent of “foreign” investment in China today comes from the diaspora.

Easterly and Nyarko (2008) see brain drain positively and, therefore, stress that brain drain is good for Africa considering that ideas and knowledge generated in the process propel the engine of national growth. As they put it, “this circulation of brains helps in the diffusion of knowledge which is precisely what is needed in our developing economies”. In its efforts to key into the potential benefits accruing from the diaspora, De Haas (2006:17) informs that the Nigerian government set up organizations, notable amongst them being the Nigeria in Diaspora Organisation (NIDO) and the Nigeria National Volunteer Service (NNVS), to harness the diaspora and channel their energies towards the development of Nigeria through investments. De Haas (2006:17) further asserts, “it is unclear how NIDO and NNVS function in practice [as] no (independent) evaluations are available”.

Oyeranti (2003) identifies factors responsible for the creation of enabling environment for FDI in developing countries as those emanating from structural reform programmes. The reforms led to progressive lowering of barriers to trade and foreign investments; the liberalisation of domestic financial markets and removal of restrictions on capital movements and the implementation of privatisation. The important thing to note about FDI is that both the investors and host countries benefit from it. Oyeranti (2003) has argued that certain factors underlay industrial countries’ quest for FDI namely, the search for higher returns and opportunities for risk diversification. Two key developments appeared to have firmly entrenched the quest of industrial countries to look outwardly. First was competition and rising costs in domestic markets and second was the transformation of financial markets from

relatively insulated and regulated national markets to a more globally integrated market (Oyeranti 2003). These developments coincided with the monumental economic crisis that enveloped developing countries as well as the new orthodoxy of the IMF and World Bank about the importance of FDI as a major stimulus of economic growth and development. Thus, FDI became a focus of policy makers in low-income countries. Even though Nigeria has the potential to attract enormous FDI in all sectors of its economy, FDI flows have been mainly in the oil sector where the country derives over 90 percent of its export earnings (Yakub 2005).

The evident truth that the concentration of FDI in the oil sector has not done the country much good led Aremu (2005) to contend that FDI inflows to Nigeria lack the relevant ingredients that could help to integrate the economy into international production chains. This is despite the fact that the volume of FDI has been on the upward trend. Statistics show that FDI flows rose to an annual average of N6, 407.1 million in 1986-92 and subsequently to N77, 500 million in 1993-98. Garba (2003:173) notes, “the increases appear to be very impressive. However, it is notable that the increases are (a) nominal and (b) naira denominated. Adjustment for inflation and exchange rate depreciation would indicate that the trend was anything but impressive”.

Generally, the quality of FDI that Nigeria attracts is not commensurate with its potentials. This is despite the concerted efforts of the government to create and nurture the enabling environment for the thriving of investments. Garba (2003) attributes Nigeria’s inability to attract expected FDIs to the negative ranking of the country on many indices of risks, financial viability, governance and infrastructure development. Fabayo (2003) also notes that prior to 1993, Nigeria used a combination of infant industry protection, local content rules, FDI restrictions coupled with other restrictive policies to retard the contribution of FDI to gross capital formation but since 1993, the rapid loosening of controls and regulations on the activities of multinational corporations in Nigeria has helped to elevate FDI in the overall framework of capital formation.

Through the instrumentality of NEEDS, the government put in place a number of mechanisms to create the enabling environment for the attraction of FDI. One was the contraction of, and indeed the relinquishing of, government involvement in the commanding heights of the economy and the concession of more space to the private sector. Obviously, this was a departure from the economic development model of Nigeria. Since independence, Nigeria had leaned towards the public sector-led growth perspective. Successive regimes believed that the quickest way to industrialise and achieve fast economic growth was for the

government to be a major player in economic activities (Ebo 2004:25). The economic crisis that characterised the Nigerian economy and the conditionalities imposed by the IFIs induced a rethinking of this development strategy. NEEDS was principally formulated to usher the Nigerian economy into the era of private sector-led growth and development through privatisation, deregulation, liberalisation and infrastructural development. Two was the creation of institutional frameworks to generate business opportunities. And three was the recognition of the diaspora as serious catalytic agents for private investments. NEEDS recognised the potentials of the Nigerian diaspora as the vanguard of Nigeria's FDI drive as well as investors. It states clearly that:

With better management of the economy and the restoration of investor confidence, a higher level of investment inflow is expected, especially in view of the high returns that investment in Nigeria offers. About \$1.5 billion a year is expected to be attracted into manufacturing, steel, construction, solid minerals, and large-scale farming over the period. Efforts will be made to attract investment from wealthy Nigerians at home and abroad, and strategies will be developed for inducing other Africans in the diaspora to invest in Nigeria (NNPC 2004:116)

A major defect in the study by Ebo (2004); Tule (2008) was their absolute silence on Nigerian diaspora and their likely contributions in the quest for private sector-led economic growth and development.

Murat, Pistoiesi and Rinaldi (2008) in their cliometric study of Italian diaspora and FDI, found a positive relationship between Italian Diaspora and attraction of FDI. They recognise Italians' "strong-ties" relationship with their home country as a major factor in attracting FDI to Italy. The strong-ties relationship between Italian diaspora and Italy is underpinned by three factors, namely; one, the circular nature of the Italian emigration, with many returning home regularly thus maintaining enduring ties with families and towns of origin; two, the tendency of Italians living abroad to live in ethnic communities (little Italys) that maintained the integrity of their ethnic identity; and three, Italian government's emigration policy which preserved the citizenship of Italians in the diaspora. Murat, Pistoiesi and Rinaldi (2008:28) outline the effect of these strong ties between Italian diaspora and their country thus:

The strong ties between the Italian diaspora and their homeland have also boosted inward FDI. In this case the mechanism at work was constituted mainly by the valuable information on

business opportunities in Italy that companies managed by emigrants utilized to invest in Italy from abroad. Moreover, the Italian citizenship has given them an additional advantage with respect to other potential foreign investors.

This led Kuznetsov and Sabel (2005) to view migration from the prism of win-win for all countries. Ikenwilo (2007) has counselled that African government could create a better links with diaspora organisations, which could help to encourage qualified African health care professionals (among others) to identify with development of their countries of origin, especially if they are given a sense of belonging and responsibility in their various countries.

Ketkar and Ratha (2007) have identified diaspora bonds as a veritable mechanism to tap into the earnings of diasporans for the development of their home countries. They conceptualise diaspora bonds as “a debt instrument issued by a country- or potentially; a sub-sovereign entity or a private corporation – to raise financing from its overseas diaspora”. The study by Ketkar and Ratha (2007) examined the diaspora bonds in Israel and India – two countries that have had varying experiences with diaspora bonds. Israel since 1951 and India since 1991 have raised hard currency financing from their respective diasporans. According to Ketkar and Ratha (2007:3), “Bonds issued by the Development Corporation for Israel (DCI), established in 1951 to raise foreign exchange resources from the Jewish Diaspora, have totalled well over \$25 billion. Diaspora bonds issued by the government-owned State Bank of India (SBI) have raised over \$11 billion to date”. Diaspora bonds are particularly regarded by Israeli authorities as a stable source of overseas borrowing as well as an important mechanism for maintaining ties with diaspora Jewry. The importance of these bonds is underscored by its usage. According to Ketker and Ratha (2007:7), “Currently, Israel uses proceeds from bond sales to diaspora Jewry to finance major public sector projects such as desalination, construction of housing, and communication infrastructure”.

The Indian experience is somewhat different from that of Israel. Ketkar and Ratha (2007:20) capture the difference thus:

The government of Israel has nurtured this asset class [diaspora bonds] by offering a flexible menu of investment options to keep the Jewish diaspora engaged since 1951. The Indian authorities, in contrast, have used this instrument opportunistically to raise financing during times when they had difficulty in accessing international capital markets (for example, in the aftermath of their nuclear testing in 1998).

The point to be noted in the experiences of Israel and India, however, is that these countries actively tapped on the financial strength of their diasporas for development. Mahroum, Elridge and Daar (2006) argue that migration is not a one-way path but involves a dynamic process of networking and linkages. These linkages create brain circulation which is beneficial to every country – both the host and home countries. They contend that emigrants enhance the development of their countries through the instrumentality of knowledge and technology transfers as exemplified by the Hsinchu Science-based industrial Park in Taiwan (whose activities account for 10 percent of GDP in Taiwan. Since the return of Nigeria to civil rule in 1999, there have been concerted efforts by the Nigerian government to incorporate the diaspora into its developmental aspirations.

Kuznetsov (2006) notes that members of the expatriate communities occupy vantage position in contributing to the development of their home countries. He identifies three resources that put them in that stead as: unusually high motivation to have a significant influence on the course of events; knowledge and expertise of both global opportunities and local particulars and financial resources to act on new opportunities (Kuznetsov 2006). In critical moments, the diaspora has served as an engine which motorised the consolidation of development. For instance, when Korean government-backed consortium failed to obtain key technologies from the US, it was the Korean diaspora in the US that provided the critically relevant technical knowledge. As Kuznetsov (2006:225) has elaborated:

A small network of Koreans working for cutting-edge firms in the United States proved critical in identifying binding constraints and designing ways to obtain and transfer the necessary knowledge... . The contribution of these expatriates was neither reverse engineering nor industrial espionage. They helped identify critical constraints, ways to get around them and relevant technical knowledge in the United States.

Extant academic and policy literature on remittances can be thematically categorised into four which delineate their thrust of argument and conclusion. These categories include:

- a. Analyses based on the *raison d'être* for remittances;
- b. Analyses preoccupied with issues relating to methods or avenues for remittances. Such analyses cover transfer channels, costs and policy options for reducing cost of remittances;
- c. Analyses of human capital emigration and their macroeconomic effects on both the host and home country.

d. Analyses of the impact of remittances on development in receiving countries.

Remittances are associated with international migration. Asmellash (2006) describes remittances as “financial counterpart” to migration. There cannot be remittance inflows or outflows except there is international migration, that is, the dramatis personae have fulfilled certain conditions: the remitter has left his/her home country and settled elsewhere outside its shores, from where he or she sends money to certain people – the recipients who have remained in the home country. That is why Maumbe and Owei (2006:5) assert that “it is difficult to separate the subject of international migration from remittances because it is the Diaspora community that drives remittance economy”. Several factors have influenced and sustained the tendency to migrate. These include unsettling economic and political conditions; outbreak of man-made disaster such as wars, civil strife, terrorism and; natural catastrophes such as earthquake, droughts, floods and famine among others (Maumbe and Owei 2006).

Taiwo (2007:20) contends that international migration “has the potential to contribute to sustainable development through remittances, skill transfer, investment, brain circulation and Diaspora networks. The most notable positive economic effect of migration is in remittances”. International migration (both voluntary and forced) is not new: it has always been part of human civilisation. However, what has changed, according to Economic Commission for Africa (2006:2), is “the increasing voluntary movement of both low-skill, low-wage workers and high-skill, high-wage workers from less developed countries to developed countries that is fuelled by the dynamics of globalization, in particular the structural needs of industrialized markets”. DFID (2006) has defined migrants as “people who, in an effort to improve their lives, move, for a temporary or permanent period, from their place of birth, and who do not necessarily enjoy the same rights and entitlements available to non-migrant individuals of that place” (<http://www.dfid.gov.uk/pubs/files/migration-policy-paper-draft.pdf>).

This definition appears restricted as it does not take cognizance of nor differentiates between voluntary and forced migration. By emphasizing movement from place of birth, it deals only with first line migrants and excludes their descendants. What this implies is that such descendants might not be categorised as immigrants, which is not the case as these still maintain links with their fathers’ relatives in developing countries. With reference to the US, Papademetriou and Terrazas (2009) have identified the composition categories of migrant flow as: lawful permanent residents (LPR), humanitarian migrants (HM) (including refugees and asylum seekers), unauthorised migrants, and temporary workers and students. Newland

and Patrick (2004:1) have observed that, “Migration does not always result in the long-term dispersal of a people; some migrants leave their home countries only temporarily, or assimilate into countries of settlement so completely that they lose their distinctive identity and ties to their homelands”.

In other words, it is the recognition of the distinctive identity and ties to the homeland that spawns the ground for a Diaspora community. Diaspora communities maintain affinity with their home countries. This position is exemplified in G. Sheffer’s conceptualisation of Diaspora as “ethnic minority groups of migrant origins residing and acting in host countries but maintaining strong sentimental and material links with their countries of origin – their homelands” (Cited in Newland and Patrick 2004:1). From its original meaning (derived from the Greek word “diaspeirein” meaning “sow”, “scatter” as in the scattering of seed, and which for the Greeks meant the seeding of Greek colonies in distant land), the word Diaspora has mutated through conceptualisation as association with forced expulsion and dispersal with expectations of return, to its current meaning implying a settled community, rather than a group of temporary migrants with the intention and ability to return to their country of origin (Encarta Dictionary 2007; Newland Patrick 2004).

Orozco (2006) conceptualises remittances as a portion of earnings a migrant sends to relatives back home. Tewolde (2005); Englama (2007); Taiwo (2007) provide a more extensive meaning of remittances. Remittances cover monetary and non-monetary items and goods or financial instruments transferred by international migrant workers living and working abroad to residents of the home economies or countries. In calculating remittances from international migrant workers, certain rules apply. According to Englama (2007:4) calculation of remittances is “limited to transfers made by workers who have stayed in foreign economies for at least one year while transfers from migrants that are self-employed are excluded”. Generally, a standardised meaning of remittance has been offered by the IMF in its Balance of Payments manual. The manual conceptualises remittance as having three components: workers’ remittances, compensation to employees and migrant transfers (Taiwo 2007; Englama 2007). Workers remittances include goods and financial instruments transferred by migrants who reside and work in another country for more than one year; they are recorded under the current transfers in the current account of the balance of payments. Workers’ remittances could be in cash or in kind to resident households in the country of origin. Compensation to employees is records of remuneration for work done. It is part of the unilateral transfers account in the current account section of the balance of payments. Compensation to employees is regarded as credit item in the current account and is therefore

very helpful in partially offsetting the deficit in trade on merchandise and services. Migrant transfers are also regarded as workers' remittances and comprise assets that migrants take with them when they move from one country to another. Migrant transfers are treated as capital transfer of financial assets as they move from one country to another and stay for more than one year. So, the remittance economy deals with the domestic economic value derived from proceeds earned by nationals or individuals working abroad and remitted to the home country (Maumbe and Owei 2006).

Englama (2007); Asmellash (2006) have sub-classified remittances into three namely: financial remittances, social remittances and remittances-in-kind. Financial remittances cover the inflow of cash and financial products both through formal and informal channels. Formal channels are legally recognised means through which cash could be sent and received. Formal channels include banks and network of International MTOs. Many countries have also introduced Diaspora bond as part of its strategies to harness fund from the Diaspora. Social remittances are in the form of provision of social amenities in the local communities in the area of health, education and so on. It also includes the transfer and inculcation of values and norms that could transform the society for the better. A social remittance occurs when migrants communicate ideas intentionally to their home country in order to achieve reforms. Remittances-in-kind are goods that are sent from abroad to home countries.

Remittances worldwide have been on the increase owing principally to the effects of globalisation and the increasing mobility of labour. Formal remittance flow worldwide in 2007 was estimated at US\$317.7 billion, signifying a leap from the 2006 figure of US\$ 297.1 billion (World Bank 2008:17). While Anyanwu and Erhijakpor (2008) report that the estimated value of remittances to developing countries in 2007 was US\$240 billion, Taiwo (2007) puts it at US\$251. The difference notwithstanding, these figures paint a picture of developing countries' dominance of worldwide remittances. There is agreement amongst scholars that the official figures posted as the trend of remittances do not represent the true picture of the general trend of remittances. Informal and unreported remittances play significant role in the remittance architecture. In 2007, informal and unreported remittances were estimated at US\$86 billion (Taiwo 2007).

In their study of the UK-Nigeria remittance corridor, Hernandez-Coss and Bun (2007:5) report that in 2004, the officially recorded flow from the UK to the developing countries was £2.3 billion or approximately US\$4.42 billion. An estimated 10-15 percent of this amount (representing a remittance corridor value of between US\$450 and \$650 million) found its way to Nigeria. In spite of this enormous chunk of overall remittances, no special

framework was erected to harness these inflows and their multiplier benefits to the Nigerian economy. Money transfer transactions consisted mainly of cash-to-cash transfers through money transfer operators (MTOs), the expensive and lengthy account-to-account bank transfer and informal channels such as hand-to-hand transfers (Hernandez-Coss and Bun 2007:22). There is no concrete evidence about the numerical strength of Nigerian migrants in the UK. Hernandez-Coss and Bun (2007:8) estimate that even though there were about 90,000 Nigerians living in the UK who had established a significant migrant community through several decades of settlement, yet this figure could not be true representative of the Nigerian migrant population as “research indicates that this figure may be higher and does not include the undocumented and UK citizens of Nigerian descent”. However, remittances have been flowing from the UK to recipients in Nigeria, Hernandez-Coss and Bun (2007:8) identify Nigerian remittance senders to include “those who are UK citizens, those who have a ‘right of abode’ or permanent residence, those who are in the UK on a temporary status such as a student or work visa, those who have illegal status because their visas are expired and those who are undocumented”. And there appeared to be a discernible remittance patterns amongst Nigerian migrants in the UK. At the top of motivations to send remittances to the home country amongst Nigerians was the cultural imperative of consanguineous philanthropism which is motorised by altruistic consideration of remittances as a means of providing economic support to recipients. While recognising the important role which culture plays in inducing remitters to send remittances to recipients in Nigeria, Hernandez-Coss and Bun (2007:8) implicate policy failure in the area of state welfare to the weak and the vulnerable thus, “since there are limited formal welfare systems in Nigeria, senders often feel obligated to provide for immediate family members as well as for extended family, friends and orphans”.

In spite of the number of Nigerian migrants in the UK and their almost religious disposition towards sending remittances, informality rather than formality characterises the choice of channel for sending remittances. It is not that formal money transfer channels are lacking in the UK; indeed, they abound. There are approximately 1,000 money transfer operators (MTOs) involved in cash-to-cash transfers, in addition to other service providers such as banks, post services and card value transfers. But remitters tended to patronise informal transfer channels, that is, they sent money to the home country through people carrying cash, community and ethnic networks, trader networks, value transfers and bus couriers. Such factors as favourable foreign exchange rates, residency status of the sender and

limited knowledge of available remittance options constitute the main factors that encourage informality in remittances (Hernandez-Coss and Bun 2007:13).

Hernandez-Coss and Bun (2007:37-38) have pointed out that notwithstanding that Nigeria receives about 65 percent of total official remittance inflows within Sub-Saharan Africa (SSA) and 2 percent of formal global remittance flows, that high levels of poverty and disparity in income characterised its economic situation. Even more perplexing was that in the year 2001 when Nigeria was ranked 18<sup>th</sup> amongst top 25 remittance receiving countries in the world, about 70 percent of Nigerians were living below the international poverty line of US\$1 a day. The work of Hernandez-Coss and Bun (2007) did not make any serious effort to link (or delink) remittances to development or as an agent of poverty reduction beyond the general acknowledgement of the enormous in-pouring of remittances to Nigeria and their potentiality to spearhead development.

Orozco and Millis (2007:3) in their study of the Nigeria-US remittance corridor which is reported to be the topmost remitting country in the world, report that “in the US, a single transfer company reports processing 125,000 transfers monthly to Nigeria”. In the absence of reliable data to underpin their study, Orozco and Millis (2007) evolve their own strategy to calculate and estimate remittance inflows. The formula they adopted was to estimate the total amount of money sent by migrants by relying on data from a re-estimation of the total Nigerian migrant population abroad and from information on the propensity of migrants to remit and on the amount and frequency of their remittances. According to Orozco and Millis (2007:4), “the results show US\$4-5 billion sent to Nigeria, an amount relatively comparable to the flow the Central Bank [of Nigeria] estimates for 2007. This estimate serves as a baseline and reference for what could be flowing into the country from different regions”.

Orozco and Millis (2007) indict Nigeria’s regulatory framework as being the main source limiting international foreign currency payments. Nigeria’s regulatory framework for money transfer is anchored on the narrow definition of authorised dealership which simply means licensed banks or authorised non-banking corporate organisations. For this reason, formal channel for remittances consists of banks acting as agents for international MTOs. On the US-Nigeria remittance corridor, a world of difference characterises the inbound (Nigeria) and outbound (US) sides of the corridor. While the US side of the corridor is characterised by competition which is “relatively diffuse and unclear”, the Nigerian side is characterised by monopoly of two MTOs through 24 banks. Orozco and Millis (2007:32) canvass the need to expand participation in the remittance market as “expanding competition lowers prices, improves service quality, reduces informality, and increases financial access”.

Although the work of Orozco and Millis (2007) shed light on the direction of remittances, the institutions that facilitate remittance and the relative volume of remittance especially from the US corridor, it did not attempt the exposition of linkages between these remittances and amelioration or otherwise of poverty. Indeed the methodology adopted by Orozco and Millis (2007:13) produced a survey result that “reflects the behaviour of higher – income recipients rather than recipients as a whole”.

Anyanwu and Erhijakpor (2008) note that Africa is part and parcel of the rising global trend in remittance flows. According to them, “between 2000 and 2007, remittances to the continent increased by more than 141 percent, from US\$11.2 billion to nearly US\$27 billion (Anyanwu and Erhijakpor 2008:2). Nigeria is not left out in the remittances boom: between 2002 and 2009, Nigeria recorded an unprecedented growth in its remittances - remittances from Nigeria Diaspora leapt from US\$1.35 billion in 2002 to US\$6.46 billion in 2005 and then to US\$19.99 billion in 2009 (Taiwo 2007; CBN 2007:228; 2009:268). The upsurge in the volume of remittances is driven by global expansion in information and communication technology (ICT). This global expansion in ICT provided the impetus to the remittance economy by providing the conducive technological environment and platform for MTOs, banks, post offices, non-governmental organisations (NGOs) and individuals to conduct commercial transactions between domestic and transnational communities (Maumbe and Owei 2006). Prior to the ICT revolution, remittances had depended on the inefficient means of money order, international postal order and telex messages. But now these means of remitting money have progressively inched into obsolescence. Maumbe and Owei (2006:14) observe that:

In the civilized modern world, the internet, mobile phones and faxes are the frontier technology that will drive the growth of remittance economy. With mobile phones becoming standard gadget for all classes of citizens, its potential in combination with the internet and e-mail could fundamentally transform the drudgery previously associated with sending money to distant relatives.

Several factors determine workers’ remittances to countries of origin. Certain scholars attribute the migrants’ pull to remit money to their countries of origin to the prevailing economic circumstance in the home country as well as political stability and consistency in government policies and financial intermediation (Wahba 1991). There are also moral considerations especially where the original factor that instigated migration emanated from

problems of economic and political instability or outbreak of man-made disasters such as wars and civil strife or natural catastrophes such as droughts, floods, famine and so on. Having migrated based on these factors, those who find themselves gainfully employed in foreign countries consider it morally binding not only to keep in touch (or close contact) with immediate family members, relatives and friends but also to contribute in alleviating their economic woes hence remittances (Maumbe and Owei 2006; Lucas and Stark 1985). Taiwo (2007) adds that remittances could be a direct or indirect reimbursement of earlier or past expenses such as schooling or cost directly related to migration or could be related to saving for the rainy day. In this case, remittances are more like an insurance deposit to guarantee life of ease when the remitter returns to the home country either on relocation or holidays.

More (2005) identifies family ties as one of the factors that determine remittances. Because this link is permanent, financial market conditions which affect inflows like FDI do not affect the flow of remittances. Again, the extended family system in Africa expands the pool of beneficiaries of remittances. More (2005:2) observes that due to both the characteristic informality as well as polygamic orientation of African family ties, the number of recipient per sender is higher than in other areas, thus extending the relationship between families and remittances. More (2005); De Haas (2006); Orozco (2000) draw attention to the poor statistical information and the penchant of Africans to embrace informality in the course of remittances as veritable hindrance to precise knowledge of the extent of the effect of remittances on development. According to More (2005:4):

A joint report prepared by the IMF and the World Bank indicates that formal remittances could represent up to 75% of those accounted at world level. These informal remittances often travel through paralegal systems, organized clandestinely and which are given different names depending on the geographical region: from *fei-ch'ien* (China) to *hundi* (Pakistan, Bangladesh) and commonly known as *hawala* in Arab countries... . The same report mentions that this informal phenomenon is more acute in Africa than in any other continent.

These shortcomings notwithstanding, there is unanimity of opinions that remittances play a vital role in the contemporary world in triggering development especially as other sources of aid for developing countries' economies have progressively declined. Taiwo (2007) contends that what should be done to encourage remittances is to strengthen and entrench remittances as a serious contributor to economic development. In other words,

Concerted efforts should be made to enhance the ratio of officially transferred financial resources and at the same time ponder on how to increase the development efficiency of remittances. This is because the larger the resources of the Diaspora saved or invested for economic expansion, the better for the country particularly, if official remittances derived from the recipient countries are properly harnessed. This is expected to enhance the chances of moving the economy on the path of sustainable growth (Taiwo 2007:250).

Apart from remittances relevantly contributing to the economic wellbeing of households, it has far more important macroeconomic effect. Orozco (2008:9) argues,

Money transfers are financial transactions that have important implications for the stability of the financial system as a source of foreign currency as well as a means for financial assets building. In developing countries, adequately leveraging such flows contributes an important opportunity for economic development.

Anyanwu and Erhijakpor (2008) corroborate that remittances have become an important source of foreign resource flows observing that between 2000 and 2006 while aid flows to the African continent increased by 94 percent, recorded remittances rose by 95.4 per cent. This picture suggests that remittances as a source of foreign resource flows assumed more significance. The significance is closely associated with several factors especially the fact that international remittances to Africa are relatively stable source of external finance in comparison with FDI, ODA and net private inflows (Anyanwu and Erhijakpor 2008).

There appears to be a disagreement in the literature about the centrality of remittances in the schema of development especially in the area of poverty alleviation. Anyanwu and Erhijakpor (2008) have delineated these contending views as optimistic view and pessimistic view. In the optimistic view school, remittances represent an important source of foreign financial resource flows. In a study which certain scholars carried out they found that every dollar received from migrants working abroad leads to increase in gross national product (GNP) (Adelman and Taylor 1990). Remittances are a potential source of augmentation of individuals' incomes and a country's foreign exchange reserves. As Taiwo (2007:25) observes, "an access to foreign exchange earnings provides valuable support to balance of payments accounts and helps development through importation of essential goods. Whether or not the foreign exchange will actually be spent on imports essential for development is, of course, a key issue". Not only does the inflow of remittances favourably affect the foreign

exchange earnings and foreign exchange reserves of the labour exporting countries, Englama (2007) points out that large remittance flows improve a country's creditworthiness for the purpose of external borrowing.

On the other hand, the pessimistic view school perceives remittances as an "illness" that weakens the economy. Remittance receipts have the capability, especially in countries with low GDP, to distort the smooth functioning of the capital markets as well as destabilize exchange rate regimes through the creation of parallel currency markets (Chimhowu, Piesse and Pinder 2003). Bridi (2005); Chami et al (2004) have pointed out that expectations of remittances from abroad induces idleness and laziness on the part of the recipients. Capistrano and Sta Maria (2007) categorise the impacts of beneficial and detrimental effects of migration and overseas remittances into three – at the macro or national level; at the community level and at the household level. At the macro or national level, inflows of remittances increase the foreign earnings of the labour exporting country (Englama 2007). At the community level, through the instrumentality of remittances from individual migrants and migrant associations infrastructural developments are embarked upon. In other words, these remittances from abroad spawn the ground for the creation of new social assets and services as well as physical infrastructure such as schools, hospitals, roads, scholarships and other community projects. At the level of the household, remittances provide the platform for a turnaround in the consumption pattern of the recipients. As Anyanwu and Erhijakpor (2008:10) observe, "international remittances increase family incomes, thus raising consumption of both durable and non-durable goods and /or savings. Indeed, in Africa, remittances are part of a private welfare system that transfers purchasing power from relatively richer to relatively poorer members of a family". But the impact of remittances on economic development generally is hinged on the sustainability of the inflow as well as the development of the appropriate structures to channel the inflows into the areas that are beneficial to the economy (Englama 2007:13).

Migration is driven by a combination of factors but what ultimately determines the depth and pervasiveness of migration is the perception of opportunity differentials between countries (Papademetriou and Terrazas 2009). It is the ever-increasing gap in the opportunity differentials between the developed and the developing countries that propels the brain drain that characterises the modern world system. Through the various adjustment programmes spearheaded by the IMF and the World Bank, the currencies of the developing countries underwent massive devaluation. Devaluation of national currencies weakened domestic

economic system and thus had the negative effect of strengthening brain erosion. As Papademetriou and Terrazas (2009:12) observe:

Currency fluctuations in response to the business cycle may encourage some migrants to remain abroad rather than return to their countries of origin. A strengthening US dollar increases the real value of remittances (relative to country of origin currency) by making migrants' income even more valuable for family members remaining in the country of origin.

Thus, such remittances have far-reaching positive effects on the economic wellbeing of the households. There is a caveat though: the positive effects of remittances on the economic wellbeing of the recipients are only possible where such remittances are put to good and productive use and not merely consumptive use (Taiwo 2007).

There is no unanimity of opinions amongst scholars about the impact of remittances on poverty. Anyanwu and Erhijakpor (2008) in their study found that international remittances reduce the level, depth, and severity of poverty in Africa. As they put it, "after instrumenting for the possible endogeneity of international remittances, we find that a 10 percent increase in official international remittances as a share of GDP leads to a 2.9 percent decline in the poverty headcount or the share of people living in poverty" (Anyanwu and Erhijakpor 2008:1).

Associated with remittances is the question of whether they are sent through formal or informal channels. These two channels - formal (that is, legally recognised means of money transfer which involves the banking system) and informal (which is alternative remittance system outside the sphere of officialdom) provide all the picture of money transfers worldwide. Several factors determine the choice of either of these channels by patrons. Englama (2007) asserts, "the attractiveness of either system is predicated on a number of factors which include among others: the cost of transactions, speed, security of funds, geographic proximity/accessibility, convenience in terms of familiarity and language". Orozco (2008) considers the formal channel as being central to evolving remittance-dependent development policies.

More (2005) has attributed the great propensity to informality in remittance inflows in sub-Saharan Africa to two major factors: weakness of the financial systems, which are either rudimentary or nonexistent in many countries and; high proportion of intra-regional migration or nomadism (where workers in seasonal employment such as agriculture migrate with their remittances). Scholars believe that formal channel represents part of the picture

which is not even up to a half. It is believed that the remittance flows from the informal channel far outweigh inflows from formal channel. Anyanwu and Erhijakpor (2008); Englama (2007); Pieke, Van Hear and Lindley (2005); Fagen and Bump (2006); Sander (2003) estimate that the informal channel is equal to 1.5 times the value of formal remittances and Fagen and Bump (2006) approximate the ratio of informal to formal channels at double.

There has been the tendency of remittances to be on the increase. Sanders (2003) argues that even though formal or official remittances to developing countries have doubled over the years, especially over the last decade, remittances to Africa have grown little and actually declined in relative market share. Informal remittance systems are attributed with positive and negative sides. According Pieke, Van Hear and Lindley (2005:15),

On the positive side, informal financial systems are usually more accessible to poor people, and those living in rural areas, than banks. Hawala-type systems and credit unions have been noted for their extensive outreach in some poor countries in comparison with banks... . On the negative side, the potential use of informal remittance systems for criminal or terrorist ends has been highlighted by initiatives to combat money laundering during the 1990s and by the investigations of the funding of the September 11<sup>th</sup> terrorist attack in the USA in 2001.

Hertlein and Vadean (2006), while acknowledging difficulties in explaining motives behind remittances, identify three factors as motorising the engine of remittances. According to Hertlein and Vadean (2006:2):

The main driving force is often considered to be altruism, in other words, concern on the part of migrants toward family members still in the country of origin... . Beyond the altruistic care of relatives, self-interest can also be a significant motive to remit... . In addition to these two motives, an implicit agreement can exist between migrants and relatives they leave behind. Relatives often cover the high cost of moving and settling abroad and are later repaid once the migrant has established himself in the destination country.

Whether remittances are sent through formal or informal channels, there is considerable evidence of their importance to migrants, their relatives and the economies of their country of origin (Pieke, Van Hear and Lindley 2005). Scholars are united in their position that remittances have been consistently stable as a source of external finance in developing countries and thus assume great importance (Englama 2007; Anyanwu and

Erhijakpor 2008; Taiwo 2007; Fagen and Bump 2006). Anyanwu and Erhijakpor (2008:8-9) have observed that:

Between 2000 and 2006 the standard deviation of the ratio of international remittances to the GDP was 5.39 while that of foreign direct investment (FDI), official development assistance (ODA) and net private inflows stood at 8.95, 9.58 and 14.4 respectively. Indeed, one reason remittances have attracted attention is that they are seen as more stable than other foreign currency flows to developing countries.

But there are discordant tunes amongst scholars about the veritable effect of remittances on development and poverty generally: they tended to dichotomize between development and poverty and the effect of remittances on them. As More (2005:7) argues,

While remittances reduce poverty automatically and autonomously, their effect on development depends on how they are used by the receiver. If they are kept untouched under the mattress, then they produce no effect whatsoever. If they are used for expenses in relation to health, education or are invested, albeit to refurbish a home, then they will produce a positive effect. But this will not occur if the money is spent on luxury items such as an imported DVD player.

In their study of the link between remittances in conflict-ridden areas and the sustenance of livelihoods, Fagen and Bump (2006) note that large segments of the populations living in conflict, war-to-peace transition and crisis contexts depend so much on remittances. Therefore, remittances are private sector inputs that serve as insurance mechanisms against sliding deeper into the abyss of poverty. This is because remittances, as More (2005:2) holds, are "... far more stable and less cyclic than any other flow of capital. Accordingly, they act as insurance against economic instability. For example, when remittances exceed 3 percent of GDP they acquire a sufficient critical mass to make financial crises less probable when foreign exchange reserves are reduced".

Fagen and Bump (2006) identify the various forms in which remittances act to reduce poverty and induce development. Remittances, in addition to being a major source of income for large numbers of people in poor countries, act as a magnet by attracting additional investible funds that would otherwise not be available. In other words, remittances by impacting on the lives of the people also impact on development. Even though there does not seem to appear unanimity amongst scholars as to the precise manner or extent to which remittances promote development, Fagen and Bump (2006:4-5) maintain that:

... there is little question that remittance income reaches social sectors that international assistance usually misses. Recipients may then use this income for health, education, improvement in nutrition and housing, or sometimes to sustain productive enterprises. Especially in countries or areas where weak or non-functioning political and financial institutions limit international access, the desired beneficiaries of development have received support far more reliably from family members than from internationally funded projects.

The high currency value attributed to remittances is as a result of the fact that remittance flows have no counter-flow, that is, they are gifts. In other words, remittances are private sector inputs delineated by family ties and accentuated by strong desires to rewrite the socio-economic circumstances of relatives in the home countries. More (2005) raises the point that the permanence of the ties of consanguinity shields remittance inflows from the vagaries of financial market conditions that plague such other sources of external financing as foreign investment. But the determination of the overall effect of remittance inflows on African development through the prism of the actual volume or real net worth of remittance has been a major challenge. A combination of poor quality statistical records manifesting in inadequate, non-existent or misleading statistics and high degree of informality in remittances are at the root of this challenge. Hertlein and Vadean (2006) in studying the factors that determine the remittance amounts draw a strong correlation between a migrant's duration of stay abroad and the size of payments. Temporary migrants especially those with their families still in the home countries tend to remit the highest sums relative to their income. In contrast, permanent emigrants generally migrate with their family members thereby reducing contact with the home country and by extension remittances. Identified also, as a major determinant of remittances, is the level of education of the migrants: the lower the qualification, the more the likelihood of higher percentage of the migrants' income being sent as remittances. The higher the qualification, the less likely that remittances will be high as the family members are with the emigrant. In other words, the temporariness or permanence of the status of the migrants is dependent on the educational background and the nature of job they do as well as what they earn from it.

Several countries have attached great importance to remittances. This is to be expected considering that remittance payments from migrants tend to represent a more significant percentage of the gross domestic product (GDP) in small or low-income national economies, indeed amounting to 2.2 percent of the GDP of developing countries (Hertlein and Vadean 2006). Hertlein and Vadean (2006) contend that migration and the attendant

remittances have significant effect on poverty through income distribution of households (as they improve the incomes of both middle-class and poorer households); spending habits (increase in household spending stimulates demand for consumer goods and services which triggers production and results in the creation of new jobs); education and health (increased remittances lead to corresponding increase in school enrolment like in El Salvador where the likelihood of urban children quitting school reduced to 10 percent) and investment.

Philippines is among the few countries that have managed emigration. Under the auspices of Overseas Employment Programme, Filipino government since 1974 fostered and regulated temporary labour emigration through labour contracts especially to the Middle East on account of the oil boom. As at 2004 up to 7.5 million Filipinos or 8 percent of the population lived abroad and made remittances through official channels that amounted to 5.2 percent of the GDP (Hertlein and Vadean 2006). In spite of the Filipino government's exemplary efforts in managing temporary emigration and coordinating remittances through the erection of favourable policy frameworks, Hertlein and Vadean (2006:6) observe:

Views on Philippines emigration policy are divided. Its means of managing temporary emigration are considered exemplary, as no other country has managed to generate such organized and protected migration flows. However, critics note that the stated goal of abolishing irregular emigration has not been met; instead, there seem to be two parallel migration movements. Moreover, the cost of brain drain on Filipino society is significant and even after nearly three decades of this emigration policy, no lasting change can be observed.

Writing in the same vein about the Philippine experience, Agunias (2008:37) observes that:

The Philippine experience has shown that the connection between migration and development is not as direct as many policy makers would like to think. Tapping the global labour market seems to effectively ease immediate problems at home, such as unemployment and balance of payments crises. However, for many local observers, the Philippine government's overseas employment strategy has yet to fully deliver when it comes to bringing about the kind of development that benefits all households, not just the migrants and their immediate families.

What these observations suggest is that international migration though directly beneficial to the remitters and their recipients, has untoward consequences on the society at large. There is no agreement amongst scholars as to how remittances precisely reduce

poverty. This is because of the fact that for remittances to frontally attack poverty they must go beyond consumption to the realm of investment. There is no clear evidence in the work of Hertlein and Vadean to conclusively hold that remittances can reduce poverty in developing countries. As they admit,

... it is impossible to come to a general conclusion about the impact of remittances on developing countries. Remittances play a different role in each country, depending on the given economic situation and the time frame in question. The short-term economic impulses and improvements in household income brought about by remittances do not automatically translate into economic development and a lasting means of alleviating poverty among the general population (Hertlein and Vadean 2006:7).

Maumbe and Owei (2006) acknowledge that the rise in remittances globally, including Africa, provides excellent opportunity for new solutions to the problem of poverty in Sub-Saharan Africa which various data suggest is widespread. Their work failed to pinpoint how remittances have stimulated action against poverty. DFID (2006:9) holds that “despite the limited availability of data for developing countries we know that poor people often choose to migrate as a way of improving their lives”. In other words, migration affords poor people a leeway out of their poverty. Having migrated, these poor folks are sucked into the global labour market where they earn competitive wages depending on their qualifications. DFID (2006:9) observes:

For individuals and their families, migration can increase income, lead to new skills, improve social status, build assets and improve quality of life. For communities and developing countries, emigration can relieve labour market and political pressures, result in increased trade and direct investment from abroad, lead to positive diaspora activity such as money being sent home (remittances), promote social and political change and lead to the eventual return by successful migrants who invest in their country of origin.

The central issue in remittances is the freedom of the remitter and the recipient to embark on wealth yielding or consumptive ventures. DFID’s (2006) report does not seem to factor this into their unqualified conclusion that remittances have a positive effect on poverty. Remittances are person-to-person flows and these persons determine both the destination of and use funds, after all, it is their money (More 2005).

Newland and Patrick (2004) have undertaken a study of six countries that are characterised by large out-migration namely, China, India, the Philippines, Mexico, Eritrea and Taiwan, seeking in the process to find out the role of the Diaspora communities in reducing poverty and expanding FDI in their countries. Though they recognise the importance of remittances but argue that:

Remittances, however, are far from being the only vehicle for diaspora influence on the incidence of poverty in their home countries. For many countries, the diaspora are a major source of foreign direct investment (FDI), market development (including out sourcing of production), technology transfer, philanthropy, tourism, political contributions, and more intangible flows of knowledge, new attitudes, and cultural influence (Newland and Patrick 2004:2).

While these other factors have effects, albeit indirectly on the incidence of poverty, remittances have a direct impact on poverty reduction as they tend to flow directly to poor households and are deployed basically to the satiation of basic needs such as food, shelter, education and healthcare. The satiation of these basic needs has a multiplier effect on the community.

For China, the diaspora contribution was more in the area of FDI. For instance, about half of the £26 billion (US\$48 billion) in FDI that flowed to China in 2002 originated from the Chinese diaspora and for India, inflows were more from remittances. Chinese direct investments were twenty times the volume of India's, whereas Indian remittances were seven times the Chinese in the 1990s (Newland and Patrick 2004). They further observe a significant expansion in the earnings and employment opportunities of the middle class and argue that making a dent in India's enormous poverty required a connection of the lowest income group to the modern economy. In all, Newland and Patrick (2004) argue that remittance-led pattern has a direct effect on national development because it puts income directly into the hands of the poor or the recipients in the short-run unlike investment-led model, which indirectly impacts on the poor through the prospects of continued job creation which benefit the poor in the long run even though that might not be the primary purpose of the business investment.

Until recently, no connection existed between international migration and development in the development strategies of the Nigerian state. What was given cursory attention was urban-rural migration which successive governments attempted to stem because of negative labelling. In other words, the Nigerian state conceived of migration from the

prism of disruptive influence manifesting in social dislocation. As De Haas (2006:14) puts it, "... in most policy circles, migration, whether internal or international, is still primarily seen as a development failure rather than a constituent part of broader social and economic transformation processes".

De Haas (2006) periodizes the change in orientation amongst Nigerian policy makers about the potential contributions of migrants to national development to 1999 when Nigeria's political system took the form of democratic governance. The signal for this recognition was exemplified by the launch of the "presidential dialogue" with Nigerians abroad in 2002. The aim of the presidential dialogue was to chart a route for Diaspora involvement in national development. De Haas (2006) attributes the inability to establish any precise link between remittances and development including the reversal of poverty in Nigeria to the discrimination of Nigerian policy makers to the value of remittances made by migrants. As De Haas (2006:17) puts it, "the Nigerian government and banks seemed mainly interested in large money transfers and major investments by Nigerians living abroad. Small-scale person-person remittances were no major issue of interest".

There are certain categorisations in the literature that tend to underplay the effect of migratory pressures on African human capital formation. Ghosh and Ghosh (2001:41) set the parameters of brain drain thus:

The phenomenon of migration of HQM from LDCs can justify the use of the term brain, but we should be cautious in using the term drain. In fact, all brain drain constitutes brain migration, but brain migration does not necessarily constitute brain drain. Brain drain is only a part of brain migration.

Flowing from this observation, Ghosh and Ghosh (2001:42) identified four types of brain migration namely, brain drain, brain overflow, brain exchange and brain export. These categorisations are of little value to the explication of the African countries in terms of the loss of their vital human capital. Brain drain of Africa's skilled professionals is patently unidirectional and lacks all the pretences of circulation and exchanges. Brain exchange means that both the sending and receiving countries benefit from the specialised experience and knowledge of expatriate professionals – and not just from their remittances, considerable as these may be (Smith 2007:1). This is not so on account of the inequality that characterises interstate relations in the modern world capitalist system. Within the milieu of this interaction African countries occupy the periphery where they operate at the pleasure of the developed countries that characteristically occupy the centre of the system. In deference to

contemporary trajectory of development, migration has become important and selective. Two main trends appear to characterise contemporary international migration: first, the quality of migrants have assumed unparalleled importance; second, less developed countries become more affected by brain drain as they serve as feeder zone (Kazlauskienė and Rinkevičius (2006:28).

There is tendency to ascribe recency to the brain drain phenomenon as it affects Africa. Oyowe (1996:59) affirms that:

Whereas Western Europe was the main loser, especially to the United States, up until the 1960s, the developing countries have emerged in recent years as the biggest suppliers of qualified professionals to the industrialised world as a whole. Today there are more than a million and a half skilled expatriates from the developing countries settled in Western Europe, the USA, Japan and Canada.

This view has been contested by scholars. Yaqub (2007:4) contends that:

The brain drain phenomenon, from available evidence, is not a phenomenon that is of recent origin nor is it unique to countries of the underdeveloped world. It is indeed a phenomenon that has, at one time or the other reared its ugly head in the developed economies as well. What however makes the situation unique in a Third World setting is the fact that, when there is brain drain, the flow process is unidirectional, i.e., it goes from the Third World country concerned to the developed world. The problem, it must be emphasized, is not just its unidirectionness, but that it is flowing from the very countries that could ill-afford the process to those that could do without, which, nonetheless and given the robust nature of their socio-economic conditions, welcome the émigrés.

The contestation about the periodization of the brain drain phenomenon is a product of the fuzziness and confusion associated with the concept. As it is generally agreed, human capital, irrespective of historical epochs, is indispensable both in unleashing the forces of development and in sustaining development. The understanding of this fact is at the epicentre of the academic disputations about the nature, depth and effect of brain drain. Those who attach recency to the brain drain phenomenon appear to conceptualise brain drain outside the framework of historical epochs or mode of production and the prevailing means of production. Productive forces differ in each historical epoch. As Igwe (2002:335) elucidates, productive forces encapsulates “‘human plus material’ forces, that is, all the human labour,

instruments, techniques and processes of an epoch – everything, including its science, technology and infrastructure - that determines the nature and level of its production”. There is a tendency in the literature to trace the adverse effects of brain drain phenomenon to the 1960s. Such a recent periodization inheres from a narrow conceptualization of what brain drain represents. Carrington and Detragiache (1999) attach recency to brain drain syndrome. This is so because they view brain drain as the emigration of “highly educated workers, such as scientists, engineers, physicians and other professionals from developing countries to developed countries”.

Brain drain is broader than that as it is traceable to Africa’s contact with Europe. The earliest form of brain drain was the infamous and obnoxious slave trade. As Babangida (1991:224) avers:

For about four hundred and fifty years, Africans were caught, manacled and shipped across the Atlantic to create wealth for their captors in the sugarcane, tobacco and cotton plantations in the Americas. Terrible were the privations to which they were subjected. Those who did not die during the raids or during the middle passage and were finally landed in the Americas were sentenced to lives of servitude without any chance of manumission.

A direct consequence of the pillage of Africa by the West was the foregone possibility of development. The human resources that were essential to trigger off development were lost to the Western World. The blood and sweat of these Africans contributed immensely to the consolidation of the fledgling western capitalist developmental trajectory. Coleman (1986:41) asserts that the same period that saw Africa tumbling down the cliff to economic subjugation and asphyxiation also marked the emergence of Europe from medieval stagnation and its transmutation through agricultural, industrial and intellectual revolutions. In analyzing the impact of earliest Western onslaught on Nigeria via slave trade, Babangida (1991:245) observes that “the chaos accompanying the slave trade retarded the African march towards development, progress and advancement in science and technology. In fact the period of the slave trade was one of retrogression”. In relation to Nigeria, Coleman (1986:40) asserts, “the total effect of the slave trade upon Nigerian society, institutions, and peoples will perhaps never be known”.

Contemporary brain drain did not start in the 1960s but in the 1980s following the economic crisis that rocked the entire length and breadth of the developing world. The dissonance between supply and demand of vital human resources in the domestic economies

of the developed countries sustained and indeed, institutionalised it. The picture of the incremental bludgeoning of the brain drain phenomenon has been painted by the UN Economic Commission for Africa and the International Organization for Migration (IOM) who estimated that:

27,000 African professionals left the continent from 1960 to 1974. The figure rose to 40,000 from 1975 to 1984. Again, this rose to 60,000 from 1985 to 1989. And since 1990, it is estimated that at least 20,000 professionals leave the continent annually....The International Organization for Migration (IOM) estimates that over 300,000 professionals reside outside Africa, and 30,000 of them have doctorate degrees (cited in Yaqub 2007:4).

The developed countries (DCs) have not only incorporated brain drain as an integral part of their development strategy but also institutionalised it. Brain drain in the international arena is a zero-sum game as migratory trend is patently unidirectional. Also, the developed countries are selective in their choice of migrants. Overall, migrants are accepted based on their age and qualification. As Kazlauskienė and Rinkevičius (2006: 28) observe,

It is estimated that in the OECD high-skilled migrant flow reach 70% of a whole migration during the period of 1990-2000. The number (sic) of highly-skilled migrants has increased in all well-developed countries, especially in Canada and Australia, as they were first to introduce selective immigration policy.

Almost all developed countries have immigration policies aimed at attracting and keeping highly skilled professionals into their economies: there were point-systems in Australia, Canada and UK; the H1-B Visas in the US, German Green card, European Blue Card, French immigration “choisie”. And these policies sought to achieve one goal: to maintain the level of its skilled personnel both now and in the future considering the fact that most European states would be in dire need of human resource supplementation as they continue to enjoy high life expectancy and low birth rate (Nyarko 2010:11). For instance, the French immigration “choisie” appeared to be a product of the proposition of the Ministry of Economy that the French labour market could face 750,000 recruitment needs each year after 2015 (Bertossi 2008: 5).

The bridging of the manpower needs of the developed countries results in a serious vacuum in the manpower pool of Nigeria and other African countries. Oyowe (1996:60) outlines the implication thus:

Indeed, Africa receives more advice per capita than any other continent. In 1988, there were more than 80 000 technical assistants, and today the figure is well over 100 000. These experts are believed to cost donors a total of \$4bn annually to maintain, a figure which represents nearly 35% of Africa's total official development aid. This situation reveals a serious flaw in the operation of international development cooperation.

Paradoxically, in spite of the human development crisis engendered by economic crisis and sustained by systemic rigidities, Nigerian leaders ostensibly designed plans to transform the country into an industrial country: a major shortcoming of such plans was the absolute lack of consideration of the importance of human capital in national industrial development. As Toyo (2002:537) observes, “foreign investment can help growth, but the question of what sort of growth it helps is not irrelevant. After all, it was attracted foreign investment that created import substitution industries which resulted in non-integration, frustrated growth, balance of payments problems, chronic debt, etc”. In other words, human capital development is indispensable if a country must develop in the direction that it desires. And such human capital must be a product of deliberate government policy. The success of the South East Asian economies aptly demonstrated this. Studies on the success of South East Asian economies demonstrated that these countries did spend a lot on education. Similarly, the examples of the US, Germany and other western countries as well as the former USSR and other socialist countries revealed that they consciously embarked on human capital development through high attention to primary, secondary, tertiary and vocational education and this attention resulted in economic growth and development for them (Toyo 2002). Oni (1999) has argued that there is a structural link between a society’s human and institutional capacity building efforts and its national ability to engineer social and economic development however such a link is anchored on building local capability and the ability to respond to challenges which is only achievable through the process of learning and cooperation between institutions.

Nigeria possesses the potential for rapid industrialisation but poor managerial capacity and weak technological institutions, shortage of financial capital, lack of entrepreneurship, poor management, underdeveloped technology, inadequate socio-economic infrastructures, shortage of technical manpower and foreign domination constitute major impediments (Ukaegbu 1991:1). Conventionally, industrialisation connotes the process by which inanimate energy or mechanical power replaces human energy in production. Modern industry is purely a product of industrialisation (Ukaegbu 1991:1). What this implies is that

industrialisation is at the epicentre of productive activities in the modern world system and actually determines national power. The preoccupation of industrialisation is the inducement of industrial development “to achieve high rates of economic growth, to provide for the basic needs of the population, to create more employment opportunities, to lead to an increasingly diversified economy and to give rise to desirable social, psychological and institutional changes” (Kirkpatrick, Lee and Nixon 1985:1). While Toyo (2002) recognises the indispensability of human capital (properly developed and trained) in unleashing economic growth and development in a country through industrialisation, Nnanna, Alade and Odoko (2003:5) have affirmed that Nigeria’s industrialisation crisis is rooted in the disparity between the availability of relevant factors of production and their efficient conversion towards improving the standard of living of the people as well as national economic indices. Toyo’s (2002) work was silent on what effects the massive exodus of trained personnel outside the shores of Nigeria had on the development quests of Nigeria. His work sought to puncture the pro-SAP arguments against government expenditure on education by demonstrating that developments around the world evolved from conscious human capital development. It did not examine the effect of losing such trained personnel (to the developed countries) on the home countries, in this case, Nigeria.

Otu and Adenuga (2006) find that investment in human capital in the form of education and capacity building through training impacts positively on economic growth. They, therefore, argue that:

Nigeria can only reposition herself as a potent force through the quality of the products from the primary, secondary and tertiary school systems, and by making her manpower relevant in the highly competitive and globalized economy through a structured, well-funded and strategic planning of her educational institutions (Otu and Adenuga 2006:23).

However, the work of Otu and Adenuga (2006) did not factor the impact of lost human capital in the matrix of Nigeria’s development especially its industrialisation. As they observe, “the accumulation of human capital involves a sacrifice of current utility...” (Otu and Adenuga 2006:8). The Nigerian economy bears this sacrifice in the training of its human capital needs which it loses to the developed countries as well as stunted industrial base. It is not enough that the Nigerian economy is characterised by monumental contradictions: the loss is two-fold – loss associated with investments in human capital development and loss

associated with the contributions they would have ultimately made in Nigeria's economic development which now develop other countries and economies.

Scholars have tended to argue from both sides of the divide with regard to negative or positive effect of brain drain on national economies. While some scholars play down the effects of brain drain on host countries by arguing that Diaspora remittances constitute part of brain gain for the benefit of host countries, others argue that underdevelopment in the labour emigrating countries (especially Third World countries) is traceable to the aggressive poaching of the bright minds of these countries. Tomori and Adebisi (2007) observe that this poaching is embarked upon in a magnitude that is hardly replaced. It is the hiatus in the production and consumption of human capital that creates a grey area for the deepened underdevelopment of the Third World countries. Rena (2008) quoting UNCTAD sources informs that one highly trained African migrant between 25-35 years represents a cash value of US\$184,000 at 1997 prices. Contrasted with this was the discovery by Orozco and Millis (2007) that "the average amount of money sent home in the form of remittances was US\$189.26 per transfer, with an average of 13 transfers per year". These remittances have been identified as contributing to development by boosting investment and entrepreneurial activities (Tomori and Adebisi 2007). The developmental potentials of remittances appear even more assured if the preliminary estimates of the magnitude of remittances are considered. According to Ratha, Mohapatra and Plaza (2008:29), "preliminary estimates suggest that Sub-Saharan African countries can potentially raise \$1-3 billion by reducing the cost of international migrant remittances, \$5-10 billion by issuing diaspora bonds and \$17 billion by securitizing future remittances and other future receivables". Rena (2008) considers diaspora remittances as inadequate and incommensurate to what émigrés would have contributed to their home country if they had not travelled. As he puts it:

Africa needs a large middle class to build a large tax base which, in turn, will enable the continent to build good schools and hospitals and provide constant electricity. What few people do not realize is that Africans who immigrate to the United States contribute 40 times more wealth to the American than to the African economy. According to the United Nations, an African professional working in the United States contributes about US\$150,000 per year to the US economy ([www.africaeconomicanalysis.org/articles/69/1/Brain-Drain-And-Brain-Gain-in-Africa/page1.html](http://www.africaeconomicanalysis.org/articles/69/1/Brain-Drain-And-Brain-Gain-in-Africa/page1.html)).

While remittances have proved to be a good source of capital, they have limitations. Analyzing data on remittances from over 113 countries, Raph, Fullenkamp and Jahjah (2005) established a counter-cyclical pattern demonstrating that remittances do not behave like capital flows used for economic development but are rather compensatory transfers for poor economic situations in the home country. But Ratha, Mohapatra and Plaza (2008) opine that remittances are a large and stable source of external financing that can be creatively leveraged for sub-Saharan Africa's development goals. A major utilitarian value of remittances in the development schema is their potentiality to improve ratings and securitization structures. As Ratha, Mohapatra and Plaza (2008:23) argue, "hard currency remittances, properly accounted, can significantly improve a country's risk rating. It may even encourage many poor countries that are currently not rated to obtain a credit rating from major international rating agencies".

Beyond remittances sent by migrants, many of them appear to be underemployed. According to Batalova, Fix and Creticos (2008:1), "more than 1.3 million college-educated immigrants are unemployed or working in unskilled jobs such as dishwashers, security guards and taxi-drivers representing one of every five highly skilled immigrants in the US labour force". Breaking this figure down, Africans were undoubtedly disadvantaged despite their being highly educated: "about a quarter of long-term immigrants from Europe and Africa, and about a fifth of long-term Asian and Latin American immigrants reported having a PhD or professional degree compared to 10.9 percent of US natives", yet immigrants from Africa were most likely to be unemployed (Batalova, Fix and Creticos 2008:13).

There has been the tendency in the extant literature to regard the skills acquired by migrants as being beneficial to their home countries, but this is dependent on whether they return home at all. Tomori and Adebisi (2007) observe that the patterns of international migration have changed from unidirectional and permanent to temporary, seasonal and circular. New information communication and technologies and dual citizenship are new trends which not only facilitate contacts between migrants and those they left behind but also enable migrants to enjoy certain levels of freedom and mobility. Tomori and Adebisi (2007:297) recognise the effect of these new trends thus:

Consequently, migrants become directly involved in the economic development of their countries of origin. In short, migrants are now being increasingly considered as agents of development, who can strengthen cooperation between home and host societies. They can contribute to development, not only through remittances, investment and entrepreneurial

activities, but also through the transfer of newly developed skills and knowledge... .

Technology transfer is never accomplished in isolation. FDI is often denominated as a mechanism to achieving technology transfer. Kinoshita (1998) while asserting that FDI is instrumental to technology transfer to domestic firms in host economies identifies four channels through which FDI can possibly impact on productivity of domestic firms through technology transfer, namely: demonstration or contagion-imitation effect, competition effect, training effect and backward and forward linkages effect. Hoekman, Maskus and Saggi (2004:3) identify other channels of international transfer of technology as including, trade in products, trade in knowledge, and intra-national and international movement of people.

Blomstrom and Kokko (2003) explain that demonstration or contagion-imitation effect is manifested in foreign firms with more advanced technologies introducing same in the local market setting or where local firms, through direct contacts with foreign affiliates imitate both operational modalities and technologies in their operations. It is also depicted where foreigners are employed by domestic firms for the purpose of benefitting from their wealth of experience in terms of knowledge of new technologies acquired in previous employment (Yauri 2006). Kinoshita (1998) notes that where the entry of foreign firms lead to more intense competition in the local industry with the effect that firms deploy new technologies to stay afloat and /or dominate the local or international market, there is competition effect. Also, competition effect may most likely induce local firms to pre-emptively introduce new technologies in order to maintain market shares. Yauri (2006) regards training, which is the accumulation of relevant skills necessary for a particular industry as a vital ingredient in the transfer of technology. Backward and forward linkages arise in situations where foreign affiliates engage in transactions with local customers and suppliers either to meet demand for higher quality, on-time delivery or to innovate more (Kinoshita 1998; Aremu 2005). Yauri (2006:37) adds, “backward linkage is encouraged in the presence of ‘local content requirements’ – which means that foreign firms have to purchase a certain percentage of intermediate inputs in a host country instead of importing from suppliers abroad”.

Backward and forward linkages spawn foreign joint-ventures and diaspora involvement in FDI inflows. The increasing currency of the diaspora as agents of FDI inflows is anchored on the retreat and diminishing influence of official development assistance (ODA) as a pillar of development in developing countries. As observed by Ratha, Mohapatra

and Plaza (2008:4), “in one of the largest expansions in private capital flow to developing countries in recent decades, private medium and long-term capital flows nearly tripled in size from \$195 billion in 2000 to \$670 billion in 2006”. This enormous inflow spawned significant diversification in the composition of private flows to developing countries for FDI, portfolio bond and equity flows, bank lending and derivative instrument.

Gueron and Spevacek (2008) acknowledge that diaspora groups have been engaged in the development of their home countries for many years. Their contributions have been enormous:

These groups have been essential contributors and respond swiftly and effectively to the emerging needs of their homeland counterparts, through philanthropic remittances, emergency response following natural disasters, conflict, economic collapse... traditional technical assistance, business investments and trade (Gueron and Spevacek 2008:2).

Overall, Gueron and Spevacek (2008) believe that diaspora groups play a critical role in accelerating technology exchange and foreign direct investment in their home countries. In other words, “diasporans are helping to bridge the digital divide in their countries of origin by incorporating technology transfer into social, economic and political assistance activities” (Gueron and Spevacek 2008). Lowell and Gerova (2004) report that India represents an exemplary case of a diaspora which instigated significant investments back home from MNCs in the information technology sector.

Technology transfers can only be effective where the rudiments of industrialisation are in place both as a deliberate government policy and as national desire. Such national desires drive the provision of vital infrastructure to support technology transfer. The essence of technology is efficiency; that is, the application of scientific and technological knowledge for efficient productive activities. As Cypher and Dietz (1997:402) elaborate:

Technology permits an outward shift of a nation’s production possibilities frontier (PPF) and creates the potential for greater output and income from the same level of goods and services with fewer resources. Technological progress reduces costs, increases productive efficiency, conserves society’s (and the world’s) resources, and establishes the capacity for a higher standard of living for greater numbers of persons.

Nigeria's story of industrialisation is a sad story of unsustainable industrialisation arising from both the domestic and international forces. Ikpeze, Soludo and Elekwa (2004:341) capture Nigeria's industrial quest thus:

Nigeria's experience with external trade and industrialization is a classic case of tragedy. Manufacturing value-added as a percentage of GDP was about five percent in 2000 (less than the proportion at independence in 1960), making Nigeria one of the 20 least industrialized countries in the world. Industrialization in Nigeria soared during the oil boom era (1973 - 1981 with manufacturing share of GDP reaching 11 percent) but has had a precipitous decline to about five percent in 2000.

Industrialisation is not merely a product of a wonderful blueprint alone. It is much more than that. The industrialisation policy which Nigeria adopted at independence was import substitution industrialisation (ISI). Ukaegbu (1991:2) points out that under ISI "industrial equipment and raw materials are transported into Nigeria, installed and used for routine production activities either by multinational corporations [MNCs], the state or indigenous private businessmen". It is important to note that the objective of ISI was domestic manufacturing of goods that were hitherto imported. The failure of ISI as an industrialisation strategy in the developing countries including Nigeria led to export-oriented industrialisation (EOI): that is, local production of manufactured goods for external markets. EOI strongly emphasizes that a state should pursue its comparative advantage in selected sectors of the economy and promote exports from these sectors and also an interventionist strategies that limit domestic disruptions (Balaam and Veseth 2005:340). Many pro-EOI analyses contend that EOI leads to rapid growth in manufactured exports. Balassa (cited in Kirkpatrick, Lee and Nixon, 1984:198 – 99) argued that:

... export-oriented policies lead to better growth performance than policies favouring import substitution. This result is said to obtain because export-oriented policies, which provide similar incentives to sales in domestic and in foreign markets, lead to resource allocation according to comparative advantage, allow for greater capacity utilization, permit the exploitation of economies of scale, generate technological improvements in response to competition abroad and, in labour-surplus countries, contribute to increased employment.

But the weak domestic structures in the developing countries including Nigeria as well as the inequality in the global capitalist system combined to make even the export-

oriented industrialisation unsuccessful. This was especially so since the state-owned enterprises (SOEs) set up by governments to drive the EOI not only shared similar structural characteristics with MNCs but bartered their domestic industrial freedom by depending on the former for the supply of operational infrastructure (technology) (Ukaegbu 1991). These industrialisation policies were adopted by Nigeria because of its acceptance of the prevailing orthodoxy that transfer of technology would enable it replicate industrial growth of the developed countries. Juma and Clark (2002:3) have identified two fundamental flaws that underpinned this belief: Firstly, that the developing countries could benefit from the experiences of the industrialised countries, that is, that the technological trajectory of the developed countries was actually replicable; and secondly, that there were no vested interests to undermine the success of such countries in assimilating imported technology.

Despite the potentiality of brain drain to transform to brain gain through brain circulation and exchanges, certain global restrictions have made it impossible for home countries to enjoy technological fallouts from their diaspora. These restrictions, under the auspices of intellectual property rights (IPRs), ensure rigidity in the diffusion of technologies. UNCTAD (cited in Juma and Clark 2002:2) has outlined the consequences thus, "since new and emerging technologies increasingly affect the volume, composition and direction of world trade, countries that are unable to gain access to these new technologies, and successfully absorb them, will find themselves progressively disengaged from the global economy". As it is, Africa is unlikely to railroad itself unto the turf of technological progress as it lacks the critical mass of technological competencies necessary to participate at the global technology frontier (World Bank Report 2008:8).

Most of the studies, while recognising the deplorable nature of healthcare delivery attributed the cause to several factors ranging from poor funding of the health sector to lack of infrastructural facilities. While there is a tangential recognition of inadequate health professionals as constituting a serious challenge to meeting goals 4, 5, and 6 of the MDGs as well as ensuring efficiency in the healthcare delivery system, there are no concrete linkages between continued deterioration in the health indices and unabated out-migration of qualified health professionals. This lack of linkage led us to hypothesise that sustained depletion of Nigeria's health professionals through out-migration led to inefficient healthcare delivery. In evaluating internal and international migration, De Haas (2006:14) posits that the contributions of internal migration to national development have been more positive than that of international migration despite the negativity often ascribed to internal migration in dominant policy analyses. Two factors appeared to have led to this conclusion: one, while

internal migration is perceived as circulating the labour power of the skilled and semi-skilled professionals within the state, international migration enhances the loss of such skills to the home country. Two, it associates international migration with large-scale capital flight in terms of the loss of the migrant to the home country and its potentials for national development Soludo (2007) identifies the Nigerian diaspora as a veritable growth reserve to sustain high growth through remittances, high skills and global networks. While some sections of the extant literature generally recognised the potentiality of the diaspora as a vehicle to impact positively on national development, others directed their searchlight on the consequences of the loss of human capital on national economies and yet others were preoccupied with the compensatory role of remittances as well as their proclivity towards rolling back poverty through micro-and macro-level investments. Most studies, viz Van Hear et al (2004); Nwajiuba (2005); De Haas (2006); Orozco and Millis (2007) recognise that Nigerian diaspora makes a substantial contribution, especially by way of remittances, to the homeland but could not connect such remittances and accruing investments to domestic incentives. Similarly, the contributions of Banjoko (2005) in terms of diaspora-led investments in Nigeria appeared inconclusive. Apart from a general and sweeping assertion that diaspora survey in 2005 showed that 92 percent of remittances were invested, there was no further evidence suggesting the direction and forces that shaped such investments. Most studies dealing with domestic investments were particularly concerned with the overall impetus to the attraction of investments and their effects on national economic development concentrating on the traditional agents of FDI inflow. Thus, studies that attempted to create a direct link between mass emigration, domestic investment incentives and attraction of investments through the instrumentality of the diaspora tended to be scarce. While extant studies dealt on major ramifications of technology transfer and intellectual property rights (IPRs) as well as the potentiality of the diaspora as a veritable vehicle to effect technology transfer in the event of reverse-migration, these studies tended to be narrow in their focus as they compartmentalised their inquiry to either issues that surround the appropriation and modification of technological and scientific knowledge towards technology growth and sustainability or IPRs as international regime of embargo against the flow of knowledge. Most of these studies appeared to lack systematic connectedness in terms of how IPRs impact on the diaspora's freedom to diffuse their knowledge. To appreciate this connection, we hypothesise that tighter regulation of intellectual property rights is inhibitive of the contributions of diaspora-led industrial investment to technology transfer. On a general note, this study focuses on the whole environment of migration and brain drain and specifically

attempts to weave a thread around brain drain and how Nigeria could erect policy frameworks to harness its diasporan assets.

## **1.6 THEORETICAL FRAMEWORK**

The nature of brain drain, its trajectories and effects on the capacity of the Nigerian state to engender development are not explicable within the context one set of factors. There are several sets of factors that motorise and sustain brain drain and they are domiciled both within the domestic and international arenas. In order to account for all these factors, this study shall adopt a synthesis of public choice theory and modern world system theory. The utilitarian value of adopting two theories is to account for the multi-dimensional nature of the brain drain phenomenon. None of these theories is encompassing enough to satisfactorily address the socio-economic and political forces that undergird brain drain. While the public choice theory applies the insight of political economy framework to elucidate the domestic forces that motorise brain drain through the actions and inactions of the elites, the modern world system theory illuminates the socio-economic forces that impel and sustain brain drain in the international arena.

Pro-migration scholars have often tended to explicate brain drain within the framework of liberalism/neoliberalism. Pro-migration scholars view brain drain as a mutually beneficial exchanges in an interdependent world that spawns and sustains global prosperity and peace for both the industrialized, newly industrializing (NICs) and developing countries. They introduce brain gain as a counter to the phenomenon of brain drain. The perspective of the pro-migration scholars is liberalism. Liberalism contends that inter-dependence and economic linkage of advanced economies with less developed economies through trade, international aid and foreign investment will open the floodgate of export markets, capital and technology required for economic development. Gilpin (1987:266) captures the essence of the liberal perspective:

Liberalism maintains that an interdependent world economy based on free trade, specialization, and an international division of labour facilitates domestic development. Flows of goods, capital and technology increase optimum efficiency in resource allocation and therefore transmit growth from the developed nations to the less developed countries. Trade can serve as an “engine of growth” as the less developed economy gains

capital, technology, and access to world markets. This is a mutually beneficial relationship since the developed economies can obtain cheaper raw materials and outlets for their capital and manufactured goods. Because the less developed economies have smaller markets, opening trade with advanced economies is believed to benefit them relatively more than it does the developed economies. Moreover, since the factors of production flow to those areas where they produce the highest rewards, a less developed economy with a surplus of labour and a deficit of savings can obtain infusions of foreign capital that accelerate growth.

Applied to migration, the liberal scholars view brain drain inversely as brain gain and view the depletion of the human resources as beneficial to both divides of the world system as such depletions are considered adequately compensated by remittances. The postulations of the liberal theory are quite lofty but beg very important questions. Its shortcomings lie in:

- a) Neglect of the role of the predominant economic interest of the policy makers and how this interest shape the outcome of domestic policies;
- b) Neglect of power differentials within the market and unclear notion of the extent to which markets generate stable integration of the economy and society (Holton 1992:240).
- c) Assumption that exchange is always free and occurs in a market between equals who possess full information and are thus enabled to gain mutually if they choose to exchange one value for another (Gilpin 1987:42-46). This assumption is wrong considering the position of the Third World economies in the global capitalist system.
- d) The persistence of global inequalities of wealth, income and power. While these are historical in origin as much as market-generated, their existence does mean that much of the world's population cannot participate in market exchange on a par with others (Holton 1992:242).

The theoretical framework upon which this study is anchored is a synthesis of public choice theory and modern world system theory and modern world system theory. While the public choice theory brings within its purview the internal dynamics that create contradictions in the economy and thus limit its expansionary capacity to enthrone full employment, the modern world system emphasises unequal relationship in the international arena and the exploitation of this inequality through the creation of relevant pull factors. Brain drain cannot happen in isolation. For pull factors to be effective, there must be push factors within the

domestic milieu. Conversely, for push factors to lead to the massive emigration of Nigerian professionals, there must be pull factors in the economies of the developed countries.

Immanuel Wallerstein is the most well-known originator of the world system theory with important developments made by several scholars including Christopher Chase-Dunn and Shannon. This theory makes possible a comprehensive understanding of the external and internal manifestations of the modernization process in the world system as well as analytically sound comparisons between different parts of the world (Halsall 1997). The basic framework of the modern world system theory is the existence of different stages or levels of national development within a unified global economy. In other words, it connotes a single unit with parts, which are functionally complementary (Lind 1978:674). Wallerstein (1976:229) conceptualises the world system as a social system which has boundaries, structures, member groups, rules of legitimation and coherence. There is extensive division of labour in the world system: the range of economic tasks is not evenly distributed throughout the world system. This notion gives rise to the basic categories of analysis – core/semi-periphery/periphery: the core regions of the Western economy occupy the central position and are the dominant players in the world system; the peripheral regions of the Third World occupy the fringes of the world system and lack economic independence and powers to chart their economic destiny independently and finally, in-between these two are the semi-peripheral regions which possess some economic autonomy but still defer to and are dominated by the Western countries (Holton 1992:138-139). Wallerstein (1976:231) avers,

The division of a world-economy involves a hierarchy of occupational tasks, in which tasks requiring higher levels of skills and greater capitalization are reserved for higher-ranking areas. Since a capitalist world-economy essentially rewards accumulated capital, including human capital, at a higher rate than “raw” labour power, the geographical maladministration of these occupational skills involves a strong trend toward self-maintenance.

Wallerstein (1976) traces the origin of contemporary world system to the 16<sup>th</sup> century following the crisis of the feudal system and the expansion of the capitalist economic system. Offiong (2003:47) observes that at the inception of the world system, the difference between the core and the periphery was relatively minor. The world system has constantly evolved, throwing up in the process three kinds of societies across human history: mini-systems (bands, tribes and small chiefdoms); single state world empire and; multi-polity world

economies. The latter categorization depicts the modern world system and its uniqueness lies in the fact that it was “the first and only fully capitalist world economy to have emerged, around 1450-1550 and to have geographically expanded across the entire planet, by about 1900” (Wikipedia). Offiong (2003:47) elucidates further that by the end of the 16<sup>th</sup> century a European world-economy consisting of Holland, England, France, Spain, and Portugal emerged as the core, with Scandinavia, Eastern Europe and Central and South America in an extractive relationship with the core. Germany and Italy consisted of the semi-peripheral enclaves. There was a constant adjustment in the world system which led to the transformation of the entire Europe as the core and countries hitherto at the periphery being elevated to semi-peripheral status. Wallerstein (1976:231) asserts,

The ongoing process of a world-economy tends to expand the economic and social gaps among its varying areas in the very process of its development. One factor that tends to mask this fact is that the process of development of a world-economy brings about technological advances which make it possible to expand the boundaries of a world-economy.

World system theory argues that modern states are the political units of modern society’s interstate system and economy. In other words, the world system is anchored on capitalism which is a system based on competition. As Wikipedia points out:

World system analysis argues that capitalism, as a historical social system, has always integrated a variety of labour forms within a functioning division of labour (world economy). Countries do not have economies, but are part of the world-economy. Far from being separate societies or worlds, the world-economy manifests a tripartite division of labour with core, semi-peripheral and peripheral-zones ([http://en.wikipedia.org/wiki/world-system\\_approach](http://en.wikipedia.org/wiki/world-system_approach)).

Wallerstein (1976:229) attributes the flourishing of capitalism to the multiplicity of political systems. The capitalist world economy as envisioned by Wallerstein (1976) is a dynamic system which changes overtime. Brain drain serves the purpose of maintaining the status quo as the manpower necessary to maintain the dominance of the developed states are “imported” from the periphery whose economies are incapable of effectively employing them. This enables certain basic features to remain in place especially the positioning of the core regions. Shannon (1989:68) notes that “the periphery was consigned to a limited form of economic development directed toward meeting the needs of the core”. Thus through access

to resources (especially raw materials) and the great profits made in the course of international trade within the world system, the core enriched itself at the expense of both the periphery (to a greater extent) and the semi-periphery (to a lesser extent). The world system theory shares the basic assumptions of dependency theory especially with regards to the methods of incorporation of regions into the world economy. The regions of the world never initiated incorporation into the world economy but were sucked into it as a result of pressures from the core region to obtain more resources and greater profits. According to Offiong (2003:50):

In this forced and super ordinate – subordinate relationship, as the core became progressively more developed, the periphery stagnated economically and politically because it could not extricate itself from the dependency situation. The semi-periphery may be able to resist being relegated to the periphery, but usually finds itself economically weak to forge itself into the core.

Wallerstein (1989:136) has also noted that the crucial characteristic in the relationship between the core and others was “the persistent long-term imbalance of trade”. It is this imbalance that has stymied the regions in their respective spheres and sustained the uneven development. Unlike the dependency theory with its bimodal system of cores and peripheries which does not sufficiently explain certain aspects of the world system, the modern world system develops a tripartite pattern that accounts for developments in the world system. With respect to the categorization of the former socialist economies, modern world system categorises it as external since they operated outside the framework of world economies but following the important changes in these economies they are now part of the modern world system (Chase-Dunn 1989; Shannon 1989; Wallerstein 1984).

Since the inception of the modern world system, there has been competition amongst the core countries for dominance and hegemony over the periphery countries. To determine a leading core country even in the core region, Wallerstein (1976) asserts that three forms of economic dominance over a period of time establishes the dominance of such a core country. These are:

- a) Productivity dominance which allows a country to produce products of greater quality at a cheaper price in comparison to other countries.
- b) Trade dominance which entails favourable balance of trade for the dominant country.
- c) Financial dominance which ensures that more money flows into the country and that its bankers receive more control of the world’s financial resources.

Wallerstein (1976) identifies three periods in the modern world system as being dominated by a single core nation: the Spanish and Portuguese ascendancy around the 1450 with the conquest of the present peripheries; the British dominance of the 1800s and the US since the World War II. The US influence appears more pervasive not because of its recency but because of its overwhelming efforts especially in terms of protecting and maintaining the status quo of the world capitalist system. In outlining the hegemonic influence of the US, the Wikipedia asserts, “after World War II, the US accounted for over half of the world’s industrial production, owned two-thirds of the gold reserves in the world, and supplied one-third of the world’s export” (<http://en.wikipedia.org/wiki/world-systemsapproach>).

On the other hand the public choice theory is a state-centred theory used to explain how political decision-making results in outcomes that conflict with, and undermine, the preferences and expectations of the general public. Public choice begins as the study of political agents using the conventional behavioral assumption of individual self-interest found in the study of economic agents (Boettke and Lopez 2002:111.) Ikpeze, Soludo and Elekwa (2004:343) explain further:

The public choice model shares basic assumptions with pluralist thinking but views both societal interest groups and government officials as purely self-interested, with the latter predominantly concerned with maintaining power by attracting and rewarding supporters and favouring certain groups. Rent-seeking via policy formation and implementation is a major feature of this process. In the public choice model the competition among the various interest groups is inimical to the collective interest. Rational politics generates irrational economic policies.

The rational politics of pandering to the interest of the elite led to the trajectory of the Nigerian economy to monoculturalism and subsequent contradictions that undermined its development and thus laid the foundation for brain drain. The Nigerian state, with its coercive force and enormous financial resources has been an arena of fierce competition for patronage and fight for booties for personal and sectional interests. The key players have been the military and the bureaucracy. All military interventions and political contests have been largely instigated by the allure of power and the fortunes that go with it in a rentier system (Ake 1981:126; Ikpeze, Soludo and Elekwa 2004:344-5). In other words, the Nigerian ruling class uses the state power to build an independent power base founded on private fortunes.

Thus, its choice of specific policies and their implementation was directly related to the need to serve personal and sectional interests.

Applied to migration and brain drain, this theory brings to the fore the primacy of economic factors in the course of production and reproduction of goods within the society. The contemporary manifestation of the social relations of production within the Nigerian state is the dominance of the state. The Nigerian state occupies the commanding height of the economy from where it immerses itself in the production process as well as being the overall regulator of the economy. The inefficiency of the state as a manager of business and the prebendal nature of politics led to distortions in the economy. So, the internal socio-economic and political contradictions in Nigeria are products of the failure of the state to satisfactorily discharge its duties. It is this failure that manifests in political instability, corruption, insecurity, mismanagement of the economy, bad leadership among others which act as push factors that impel brain drain.

#### **(i) Application of the Theory**

In this study, the public choice theory and the modern world system theory will be seamlessly applied to demonstrate that brain drain is both a manifestation of internal socio-economic and political dynamics; and sundry forces in the international arena which accentuate the age-long exploitation that characterises relations in the modern world system. Consistent with relations in the global capitalist system where competition for economic supremacy (in an international division of labour) bestows advantages to the superior to the detriment of the subordinate, the core countries poach the labour power of the periphery for their continued advancement. As Halsall (1997) observes, the capitalist world system is based on an international division of labour that determines relationship between different regions as well as the types of labour conditions within each region. The dynamics of the capitalist world economy bestows clear advantage on the core regions and disadvantage on the periphery regions.

What laid the foundation for the emigration of highly-skilled Nigerians was the bouquet of contradictions within its political economy as a result of the actions and inactions of the ruling class in the pursuit of their policy choices. Rather than expand the economy beyond the cash crop economy model it inherited from the erstwhile colonial masters, the emergent Nigerian leadership chose to lead the economy to monoculturalism as soon as oil

became an important international commodity with appreciated price. Monoculturalism exposed the Nigerian economy to all manner of vulnerabilities. It led to the reconfiguration of social relations of production around the Nigerian state, which created unhealthy rivalry among the elite and between the elite and the people. The effect of this was the stagnation of the economy and the reversal of the trajectory of national growth and development. At the international arena, the international division of labour created inequality among countries. The monocultural base of the Nigerian economy disarticulated its economy and constrained its inherent expansionary capacity. Contrarily, the robust economies the developed countries pulled the premium manpower of Nigeria.

Migration is a product of several internal and external causes ranging from reaction to economic downturns, political instability and repression, civil or tribal wars and so on in the labour-exporting country to favourable immigration policies, availability of jobs, conferment of citizenship status, and award of scholarship among others in the labour-receiving country. The contradictions in domestic economies, inequality in the world system and differentials in the control of the global wealth dictate the trend of migration. For Nigeria, the complete picture of migration is that it is induced by the contradictions that characterise its economy, which are both internally- and externally-generated. In other words, internally, the surge in the number of Nigerian emigrants is locatable in the economic crisis that engulfed the country starting from the 1980s and the attendant IMF/World Bank pill of structural adjustment; and externally, by the nature of unequal exchange in the world capitalist system as well as the domestic policies of the developed countries.

Both the public choice theory and modern world system theory are apt to the study of the brain drain question and its impact on Nigeria's development. They offer explanations to the identified underlying factors that fuel brain drain in Nigeria as well as the strategies to reverse it. They hold as important the economic conditions that stimulate the ordering of the political economy of Nigeria as well as relations within the global system. Therefore, in looking at Nigeria, these theories pay due attention to the economic conditions that connect it to the world economic system and helps us to understand why brain drain is occurring ( its domestic and international underpinnings); who is the ultimate beneficiary of brain drain syndrome; how brain drain relates to and shares the essential qualities of the exploitative capitalist onslaught of the slave trade era; and, why Nigeria and other countries of the peripheral states are made enclaves for the supply of knowledge in this era.

## **1.7 HYPOTHESES**

This study has, as its major preoccupation, the task of testing the following hypotheses:

- 1) The sustained depletion of the stock of Nigeria's health professionals through brain drain leads to inefficient healthcare delivery.
- 2) Domestic investment incentives tend to boost diaspora-led investments in the Nigerian economy.
- 3) The tighter regulation of the global regime of intellectual property rights is inhibitive of diaspora-led industrial investments towards technology transfer.

## **1.8 METHODS OF DATA COLLECTION**

The task of this section is to outline the processes and procedures employed in this study to gather, analyse and present the data which are at the core of this research enterprise. The mission of these data is to confirm or deny relationships amongst the variables in our research questions.

### **(i) Method of Data Collection**

Data represent the building blocks of evidence necessary to validate or invalidate research questions. Whatever the research design is – experimental, quasi-experimental or correlational – the use of data is what dictates the thrust of research. Every study has its own specialised data which are obtained through certain methods or techniques. For this study, the method of data collection is lived experiences of some Nigerian diaspora and secondary sources: identification and utilisation of relevant documentary evidence already assembled by scholars and recognised institutions. Secondary sources include amongst others: journals, textbooks, seminar and conference papers, working papers, manuscripts, official government reports and statistical bulletins.

The survey studies and statistical data generated by such institutions as the Central Bank of Nigeria (CBN), National Bureau of Statistics (NBS) and the Nigerian National

Planning Commission (NNPC) as well as the National Investment Promotion Commission (NIPC), United Nations Conference for Trade and Development (UNCTAD), and National Office for Technology Acquisition and Promotion (NOTAP) will also be invaluable to this study.

**(ii) Research Design**

Research designs are indispensable in the research enterprise as they are the roadmap depicting the building blocks and the systematic processes the research must pass through in order to validate or invalidate the hypotheses of the study. It is within the framework of the research design that the procedure involving how the data are to be collected, analysed and interpreted, measured and presented are outlined. Legee and Francis (1974:66) assert that “each research design is like a blueprint that tells us how to reach plausible answers to research problems”. There is an umbilical link between research and research design. Igwe (2002:383) notes this link thus:

[Research is] a systematic enquiry to discover phenomena, the laws governing them and the diverse means of the application of the knowledge to practical situations. On the other hand, [research design is] the methodological and related processes employed in research especially with regard to theoretical framework, and the collection and manipulation of data.

Therefore a research design is a plan of action which guides a researcher or prevents them from veering off course in the process of collecting, analyzing, measuring, interpreting and presenting data. Legee and Francis (1974:66) note that there are three questions which a research design must satisfy satisfactorily: will the design provide plausible answers? Does the design permit control over extraneous sources of variance? And lastly, is the design practical and ethical? Black and Champion have detailed the functions of research design thus:

- i. It provides the researcher with a blueprint for studying research problems;
- ii. It dictates boundaries of research activity and enables the investigator to channel his energies in specific direction;
- iii. It enables the investigator to anticipate potential problems in the implementation of the study; and
- iv. It helps to provide some estimates of the cost of research, possible measurement problems, and the optimal allocation of resources (Cited in Obasi 1999:50).

The research design for this study recognises the peculiarity of the data relevant for the validation or otherwise of the research questions. To be able to roundly address these questions, this study adopted *One-Group Time Series Research Design*. This design is symbolised as:  $O_1 O_2 O_3 X O_4 O_5 O_6$ .

One-Group Time Series Research Design enables a panoramic picture of the trends in the data within a period of time. The appropriateness of this design is denoted by the type of data generated for the validation or otherwise of our hypotheses: they are sourced from the repository of official database (national and international). This design allows for an observation to be made before and after introducing the treatment over a period of time.

Brain drain is a unidirectional flow of premium human resources from one section of the globe (developing countries) to another (developed countries), although there is appreciable movement of professionals within and amongst countries of the developing countries. But this study focuses on the movement of human capital from the developing countries to the developed countries of the West. These human resources bridge the human resource gap in these developed countries and thus contribute in not only entrenching their dominance (developed countries) but also the underdevelopment of the origin countries (developing countries) in the modern world system. There are counter-views about how perniciously detrimental brain drain is in the development quest of developing countries: some studies outrightly hold that rather than view the emigration of professionals from the developing countries to the developed countries in purely negative terms that evidence abound about the beneficial impact of migration on origin countries especially through remittances, brain-circulation and foreign direct investment and technology transfer.

This study is anchored on three hypotheses which seek to establish whether or not there is a link between sustained depletion of the stock of Nigeria's health professionals through brain drain and inefficient healthcare delivery; domestic investment incentives and diaspora-led investments in the Nigerian economy; and, tighter regulation of the global regime of intellectual property rights and diaspora-led industrial investments towards technology transfer. These hypotheses are couched in relational terms; that is, dependent and independent variables. The usefulness of relational categorisation of variables lies in its general applicability, simplicity and special importance in conceptualising and designing research as well as communicating the results of research (Kerlinger 1973:35). The relationship amongst variables in our hypotheses is asymmetrical. As Rosenberg (1968:9-10) opines, "in this type of relationship, we postulate that one variable (the independent variable) is essentially 'responsible for' another (the dependent variable)". **Table 1.2** contains the

hypotheses that guided this study and denoted the relational connectedness of the variables as well as the trajectory of causality.

**Table 1.2: Relationships amongst Variables in Hypotheses**

<b>Hypotheses</b>	<b>Independent Variable</b>	<b>Connector</b>	<b>Dependent Variable</b>
Hypothesis 1	The sustained depletion of the stock of Nigeria’s health professionals through brain drain	Leads to	Inefficient healthcare delivery
Hypothesis 2	Domestic investment incentives	Tend to boost	Diaspora-led investments in the Nigerian economy
Hypothesis 3	The tighter regulation of the global regime of intellectual property rights	Inhibits	Diaspora-led industrial investments towards technology transfer

Having established the relational connectedness of the variables in our hypotheses, it is appropriate at this juncture to proffer operational definitions and empirical referents of the constitutive variables in our hypotheses. These will not only guide the collation of the necessary data but also lead us to the validation or otherwise of our hypothetical statements.

Operationalising concepts and variables used in the construction of hypotheses is critically important. Its importance lies in the fact that it establishes consistency in the understanding of what these concepts and variables represent. Obasi (1999:51) enumerates further importance of operationalising variables as including: the simplification of variables that otherwise would have been complex; the promotion of clarity, specificity and concreteness in research through the removal of abstractness and ambiguity; limiting an array of meanings that a variable would have assumed thus ensuring the manageability of research work and enabling hypotheses to be expressed and tested in clear, specific and purposeful manner. What this implies is that misunderstanding often surrounding the exact meaning of concepts and variables due to their susceptibility to multiplicity of interpretations is minimised as their meanings are standardised. The operationalisation of concepts entails their metamorphosis from the level of abstraction to concreteness. Thus, concepts transform to

variables and these variables have indicators or parameters that set measurement criteria. In other words, operationalisation ensures that variables are assigned empirically observable, verifiable and measurable values (Obasi 1999:26). **Table 1.3** below specifies the meanings attached to the variables in the study.

**Table 1.3: Classification of Empirical /Operational Indicators or Referents**

Hypotheses	Concepts	Operational referents/indicators Hypotheses
<p><i>The sustained depletion of the stock of Nigeria's health professionals through brain drain leads to inefficient healthcare delivery.</i></p>	(i) Sustained depletion;	<ul style="list-style-type: none"> <li>- Continuous reduction in number;</li> <li>- Decrement in stock;</li> <li>- Uninterrupted erosion.</li> </ul>
	(ii) Nigeria's health professionals;	<ul style="list-style-type: none"> <li>- Trained persons in health-related course or profession;</li> <li>- Personnel with basic academic degrees in health-related courses and qualified by relevant bodies.</li> </ul>
	(iii) Brain drain;	<ul style="list-style-type: none"> <li>- Outward movement of tertiary-educated and highly-skilled personnel from a country of origin to another country;</li> <li>- Residence in another country other than country of origin.</li> </ul>
	(iv) Inefficient	<ul style="list-style-type: none"> <li>- Sub-optimal</li> <li>- Less than ideal benchmark set by recognised national and international institutions.</li> </ul>
	(v) Healthcare delivery	<ul style="list-style-type: none"> <li>- Provision of health service;</li> <li>- Prevention, cure and management of diseases (both communicable and non-communicable diseases)</li> </ul>
<p><i>Domestic investment incentives tend to boost diaspora-led investments in the Nigerian economy.</i></p>	(i) Domestic investment incentives;	<ul style="list-style-type: none"> <li>- Government provision of infrastructure such as good roads, power supply, land, investment fund and tax exemptions for a period of time.</li> </ul>
	(ii) Diaspora-led;	<ul style="list-style-type: none"> <li>- Organised by citizens residing in other countries;</li> </ul>

	(iii) Investments	<ul style="list-style-type: none"> <li>- Investments made by either individuals or corporate bodies in countries other than theirs.</li> <li>- Finances or capital injected into an economy for the purpose of achieving returns.</li> <li>- Equity and portfolio investments by members of the diaspora designed to yield returns for personal financial gains.</li> </ul>
<i>The tighter regulation of the global regime of intellectual property rights is inhibitive of diaspora-led industrial investments towards technology transfer.</i>	(i) Tighter regulation;	<ul style="list-style-type: none"> <li>- Stricter requirements to adhere to the provisions of IPRs.</li> </ul>
	(ii) Intellectual property rights;	<ul style="list-style-type: none"> <li>- Rights relating to the control of patents, copyrights and other rights pertaining to ownership or control of ideas, innovations and creations.</li> </ul>
	(iii) Diaspora-led industrial investments	<ul style="list-style-type: none"> <li>- Investments spearheaded by the diaspora for the purpose of enhancing the production /manufacturing of goods and services in the most advanced manner..</li> </ul>
	(iv) Technology transfer	<ul style="list-style-type: none"> <li>- New cutting edge technologies acquired for the enhancement of production.</li> </ul>

**Table 1.4: Measurement Indicators**

Hypotheses	Measurement
Hypothesis 1	<ul style="list-style-type: none"> <li>- Country's reported stock of health professional;</li> <li>- Country's reported health indices</li> <li>- Rate of turn-out of health professionals by institutions;</li> <li>- Rate of emigration of health professionals;</li> <li>- Cross-country comparative availability of health professional;</li> <li>- Ratio of health professionals to population.</li> <li>- Incidence of communicable and non-communicable diseases.</li> </ul>
Hypothesis 2	<ul style="list-style-type: none"> <li>- Government incentive package: Tax holiday, liberalization of economic sectors;</li> <li>- Representative domestic investment profile of the diaspora;</li> <li>- Reported rate and value of FDI inflows;</li> <li>- FDI inflows by sector;</li> <li>-</li> </ul>
Hypothesis 3	<ul style="list-style-type: none"> <li>- Intellectual property rights</li> <li>- Conditions for diffusion of new technologies.</li> <li>- Conditions for research and development</li> <li>- National and international restrictions to access to new machineries, new methods processes).</li> </ul>

The measurement indicators help in the precise assemblage of relevant data to prove or disprove our hypotheses. **Table 1.4** shows the measurement indicators of the hypotheses. The sources of data which this study utilised to examine the research questions are traditionally categorised as secondary sources. Secondary sources of data are undoubtedly useful as they represent a repository of data and facts about events as seen from the eyes of chroniclers and survey analysts. Whether sources of data are primary or secondary, the issue of reliability and validity of data is critically important.

We recognise that there are likely threats to the validity and reliability of our research data. These threats include: subjective and value-laden exposition by previous commentaries,

arbitrariness in the choices of data to be collated by the investigator, absence of independent controls to assess characteristic errors, political control and manipulation of statistical data, and discrepancies in conclusions reached in the analysis of the same events by commentators/researchers.

The methodology which the study adopted in sifting through the corpus of data at its disposal is content analysis: it evaluated the data against the backdrop of empirical indicators earlier identified. Content analysis, as Igwe (2002:12) notes, is the “interpretative understanding of the substance of various forms of communications, whether written, spoken or symbolic”. Such interpretative understanding is anchored on “a careful definition of concepts, the establishment of categories and units for processes, actions, and actors, and a specification of how judgements are to be made in the classification of pieces of information” (Leege and Francis.1974:210-211). In fact through the instrumentality of content analysis, uniformity and consistency amongst the various data were established thus bestowing some sort of integrity upon them. And the errors likely to stem from the sources of data were reduced to the barest minimum by careful cross-comparison of data sources.

### **(iii) Method of Data Analysis and Presentation**

The collection of data is only an aspect of the network of requirements for the validation or otherwise of hypotheses. The data so collected must be systematically analysed to demonstrate the relationship amongst variables. As Igwe (2002:103) observes ‘most research data are meaningless except classified’. The data will be analysed in the tradition of qualitative descriptive research with the application of one-group time-series research design. The analysis and presentation of the data will also be done within the ambit of the modern world system theoretical framework using statistical tables, simple percentages and charts.

### **(iv) Logical Data Framework (LDF)**

Logical data framework distils and presents the research procedure in a format that eases comprehension of the research. It is presented in tabular format. **Table 1.5** shows the LDF, which is a tabular summarisation of the research procedure.

**Table 1.5: Logical Data Framework (LDF)**

S/N	Hypothesis	Variable	Main Indicators	Data Sources	Method of Data Collection	Method of Analysis
1	The sustained depletion of the stock of Nigeria's health professionals through brain drain leads to inefficient healthcare delivery.	(X) Sustained depletion of the stock of Nigeria's health professionals through brain drain	<ul style="list-style-type: none"> <li>- Country's reported stock of health professional;</li> <li>- Rate of turn-out of health professionals by institutions;</li> <li>- Rate of emigration of health professionals;</li> <li>- Cross-country comparative availability of health professional;</li> <li>- Ratio of health professionals to population.</li> </ul>	<ul style="list-style-type: none"> <li>- WHO documents;</li> <li>- WHO website;</li> <li>- UNICEF documents;</li> <li>- FMOH documents;</li> <li>- MDCN website;</li> <li>- Nigeria's National Bureau of Statistics;</li> <li>- World Health Reports;</li> <li>- IOM publications/websites;</li> <li>- Library texts, journals, magazines, and newspapers;</li> <li>- Policy/position/working papers and reports.</li> </ul>	<ul style="list-style-type: none"> <li>- Documentary method;</li> <li>- Content analysis of secondary source materials such as official documents, longitudinal statistical compilations, books, journals, essays interviews, reports, annual and periodic reports.</li> </ul>	<ul style="list-style-type: none"> <li>- Theoretical framework of modern world system theory;</li> <li>- Qualitative descriptive application of one-group time series design;</li> <li>- Statistical tables;</li> <li>- Figures;</li> <li>- Simple percentages;</li> <li>- Tabulation and classification data.</li> </ul>
		(Y) Inefficient healthcare delivery	<ul style="list-style-type: none"> <li>- Incidence of communicable and non-communicable diseases;</li> <li>- Country's reported health indices;</li> <li>- Ideal health benchmarks set by recognised national and international institutions.</li> </ul>			
2	Domestic investment incentives tend to boost diaspora-led investments in the Nigerian economy	(X) Domestic investment incentives	<ul style="list-style-type: none"> <li>- Government incentive package: Tax holiday, liberalization of economic sectors;</li> </ul>	<ul style="list-style-type: none"> <li>- FGN's website;</li> <li>- CBN publications (Annual Reports, Economic and Financial Review journal, CBN briefs etc);</li> </ul>	<ul style="list-style-type: none"> <li>- Documentary method;</li> <li>- Content analysis of secondary source materials such as official documents, longitudinal</li> </ul>	<ul style="list-style-type: none"> <li>- Theoretical framework of modern world system theory;</li> <li>- Qualitative descriptive</li> </ul>

			<ul style="list-style-type: none"> <li>- Formation /Activities of NIDO/NNVS;</li> <li>- Government's institutional framework for the Nigerian diaspora;</li> <li>- Investments by Nigerian diaspora and affiliates.</li> </ul>	<ul style="list-style-type: none"> <li>- NIPC publications;</li> <li>- Nigeria's National Bureau of Statistics;</li> <li>- World Bank/IMF;</li> <li>- Library texts, journals, magazines, and newspapers;</li> <li>- Policy/position/working papers, and reports.</li> </ul>	<p>statistical compilations, books, journals, essays interviews, reports, annual and periodic reports.</p>	<p>application of one-group time series design;</p> <ul style="list-style-type: none"> <li>- Statistical tables;</li> <li>- Figures;</li> <li>- Simple percentages;</li> <li>- Tabulation and classification data..</li> </ul>
		(Y) diaspora-led investments	<ul style="list-style-type: none"> <li>- Remittance inflows;</li> <li>- Recorded rate of FDI inflows/ value of FDI;</li> <li>- Diaspora-financed investments.</li> </ul>			
3	The tighter regulation of the global regime of intellectual property rights is inhibitive of diaspora-led industrial investments towards technology transfer.	(X) Tighter regulation of the global regime of intellectual property rights	<ul style="list-style-type: none"> <li>- Intellectual property rights;</li> <li>- Conditions for diffusion of new technologies;.</li> <li>- Conditions for research and development;</li> <li>- National and international restrictions to access to new machineries, new methods and processes.</li> </ul>	<ul style="list-style-type: none"> <li>- NOTAP website;</li> <li>- WIPO website;</li> <li>- World Bank publications;</li> <li>- Library texts, journals, magazines, and newspapers;</li> <li>- Policy/position/working papers, and reports.</li> </ul>	<ul style="list-style-type: none"> <li>- Documentary method;</li> <li>- Content analysis of secondary source materials such as official documents;</li> <li>- longitudinal statistical compilations, books, journals, essays interviews, reports, annual and periodic reports.</li> </ul>	<ul style="list-style-type: none"> <li>- Theoretical framework of modern world system theory;</li> <li>- Qualitative descriptive application of one-group time series design;</li> <li>- Statistical tables;</li> <li>- Figures;</li> <li>- Simple percentages;</li> <li>- Tabulation and classification data.</li> </ul>
		(Y) Diaspora-led industrial investments towards technology transfer	<ul style="list-style-type: none"> <li>- Technology transfer policies</li> </ul>			

## 1.10 DEFINITION OF KEY TERMS/CONCEPTUAL CLARIFICATIONS

Several concepts were used in this study. Many concepts have multiplicity of meanings depending on the context of their usage and the meaning which the researcher attaches to them. In order to avoid the arbitrariness in allocating values to our concepts, there is need to standardise their meanings. The major concepts have been identified and set below with the meaning attached to them in the study. These are:

- i. **Brain Drain:** The loss of tertiary-educated and highly-skilled persons through emigration from their country of origin to another country. This loss is usually to the detriment of the home country of the émigrés. It also denotes the rapid emigration of this class of human resources more than they can be replaced or reproduced. Brain drain involves the depletion of strategic manpower, which seriously affects skill formation and creates a growth-retarding backwash effect.
- ii. **Remittances:** Remittances represent the portion of migrant workers' earnings sent home to their families, relatives and friends. Remittances have been a critical means of financial support from the diaspora to people in their home countries.
- iii. **National Development:** This implies dynamic process of structural transformation of the economy, polity and socio-cultural arena, which leads to growth, advancement, empowerment, and progress in all dimensions of human life and activity in a country.
- iv. **Nigerian Diaspora:** Diaspora generally refers to a group of people "dispersed" from their place of origin either by design or forcefully but who still share some sense of common identity and maintain ongoing links with their place of origin in diverse forms. Nigerian diaspora connotes people who originated from Nigeria by birth but who live outside the shores of Nigeria as citizens, permanent or temporary residents of those other countries and still maintain ties with the country.

- v. **Internal Migration:** This refers to the movement of people within their country of origin. It could take the form of rural-urban migration; rural-rural migration or urban-urban migration.
- vi. **International Migration:** The movement of people from their countries of origin to other countries for various reasons. International migration is induced by both domestic and international forces ranging from socio-economic crisis to political instability on one side to socio-economic prosperity and political stability on the other. It could be voluntary or forced. An example of voluntary international migration is brain drain or the deliberate emigration of persons out of their home countries. Forced migrants consist of trafficked persons, asylum seekers or refugees.
- vii. **Net Migration Rate:** The difference in the number of immigrants and emigrants in a country within a defined period of time.
- viii. **Population Movement:** This connotes the physical movement by groups of people from one geographical area to another. Population movement could occur through three major mechanisms: voluntary, forced or induced.
- ix. **Labour Migration:** The movement of all categories of workers from their home countries to other countries where their services are in demand.
- x. **Brain Gain:** This refers to the transference of the expertise and acquired knowledge of the diaspora into the domestic arena by returning migrants. The home country is believed to generally benefit from the knowledge acquired by migrants when they return home.
- xi. **Reverse-Migration or Return-Migration:** The return of migrants to their home countries and the deployment of knowledge, skills and expertise acquired in the process of emigration to the development of their home country.

## **CHAPTER 2**

### **THE POLITICAL ECONOMY OF LABOUR MIGRATION AND BRAIN DRAIN IN NIGERIA**

#### **2.1 INTRODUCTION**

Although Nigerians had emigrated in the past, the circumstances and forces that shaped emigration then were different from those that motorise it contemporaneously. Apart from slave trade, Nigerian migrants in colonial and immediate postcolonial period tended to travel for personal development in terms of acquiring higher qualifications. But now, emigration is an antidote to the inadequacies of Nigeria's domestic economy. Contemporary labour migration and brain drain in Nigeria are products of domestic and international forces. At the domestic arena, the interplay of political and socio-economic forces laid the foundation for labour migration and brain drain. In concrete terms, the economic uncertainties whose manifestations were locatable in unemployment, underemployment and lack of job satisfaction; the political instability and sundry ethnic conflicts, which have spawned various forms of marginalisation in the polity, all served as the necessary push factors that underpinned labour migration and brain drain out of Nigeria. Although labour migration and brain drain have drilled a large hole in Nigeria's manpower formation, it is the brain drain phenomenon (the emigration of Nigeria's highly-skilled professionals) that has had far-reaching implications on its development prospects as Nigeria's vital sectors are shorn of the necessary skilled professionals to drive them.

At the international arena, the politics and economics of global competition for ascendancy led to the adoption of important domestic policies in the developed countries, especially the lowering of immigration hurdles for migrants. A combination of such factors as the quest to remain at the core of the modern world system, low fertility and ageing population as a result of high life expectancy and improved health services in the developed countries kept the doors of emigration open. This chapter evaluates the politics and economics of the emigration of Nigeria's highly-skilled manpower and the effects which this brain drain has on the trajectory of its development.

## **2.2 THE DYNAMICS AND DIALECTICS OF LABOUR MIGRATION AND BRAIN DRAIN IN NIGERIA**

Labour migration and brain drain are not new phenomena in Nigeria's political economy and architecture of development. Nigeria's labour stock has played key roles in the global epochal phases through forceful and voluntary migrations. Nigeria's contact with Europeans spawned the ground that led to the wholesale and organised depopulation of its human resources through the slave trade and continues through the brain drain syndrome (Igwe 2002:398). The nature of global political economy at the period that Europeans first came in contact with Nigeria (in the pre-colonial and colonial periods) required human capital to power Euro-American economic interests. The instrumentality of labour migration then was forceful slavery and migrants composed of virile young men and women whose physical strength was paramount in the production chain. The shift in economic policy of Europe underpinned the anti-slavery campaign and the imperialism that followed.

The divergence of views about who exploits and who is exploited in the milieu of labour migration inhered from the misunderstanding of the forces at play in the production chain, especially the changing nature of labour processes in the course of production. As Ake (1981:11) observes, "the productive forces express the overall productive capabilities of the society. They tend to develop all the time". It is this constant development that determines the quality of labour that is relevant in each epoch. The contemporary brain drain is a product of the advances and changes in the global production system. These changes dictated the type of labour power needed to motorise production. Two contradictory scenarios created the trajectory of brain drain: one, the seeming incapacity of the developed countries to raise the necessary manpower to drive production; and two, the incapacity of such countries like Nigeria to adequately utilise and compensate its highly skilled manpower.

The Western Europe used to be the main losers especially to the US until recently when the developing countries took over as the biggest suppliers of qualified professionals to the industrialised world as a whole (Oyowe 1996:59). These migrant professionals unwittingly contribute to the ever-present disparities between the world's rich and poor states. Between 1960 and 2000, the total global migrant stock increased from 92 to 165 million. The greatest growth in the number of migrants was largely driven by people migrating from the developing countries to the developed countries, which increased from 14 million to 60 million over the period (Ozden et al 2011). Currently there are over 215.8 million immigrants, refugees or asylum-seekers and migrant workers outside their countries

of birth or citizenship. As a result their sheer number, if these migrants were to assemble in a common geographical location, they would be among the world's ten largest countries (Martin 1994: 241; IFAD 2007:2; World Bank 2011:18).

Yaqub (2007:4) asserts that brain drain is neither a phenomenon that recency could be ascribed to nor its damaging effects restricted to Nigeria. Brain drain negatively affects every country that is a victim, whether the country is classified within the developed or underdeveloped section of the world as it involves the international transfer of resources in the form of human capital from one country to another (Beine, Docquier and Rapoport 2003:1). Dilworth (2009) corroborates that brain drain equally threatens developed countries as exemplified by the erosion of Canada's economic prospects and competitiveness as a result of the mass emigration of skilled Canadians in search of the satiation of sundry personal expectations ranging from higher salaries, lower taxes to more opportunities. The difference between the developed countries and their underdeveloped counterparts lie their different abilities to engender appropriate policies to cushion the effects. Cervantes and Guellec (2002) have pointed out that the developed countries have put in place various frameworks to discourage brain drain from, and encourage brain flow to, their countries. In 2000, the British government in collaboration with the Wolfson Foundation, a research charity, launched a £20 million scheme aimed at attracting the return of Britain's leading expatriate scientists and top young researchers to the United Kingdom. In the same year, (2000) the US Congress announced an increment in the number of temporary work visas granted to highly skilled professionals under its H1B visa programme from 115,000 to 195,000 per year until 2003. The aggressive policies put in place by the developed countries to attract and retain both skilled labour and professionals in their economies have been to the detriment of developing countries. On the other hand, the brain drain flows from the underdeveloped countries have been patently unidirectional. To underscore the pervasiveness and counterproductive nature of brain drain, Yaqub (2007:4) laments:

The problem, it must be emphasized, is not just its unidirectionness, but that it is flowing from the very countries that could ill-afford the process to those that could do without, which nonetheless and given the robust nature of their socio-economic conditions, welcome the émigrés. What makes the loss of the under developed countries more painful is that they are never likely to experience any net gain whenever brain drain occurs in any developed country.

The point being made here is that while the emigration of skilled and talented workers

to the developed countries translates into gain in the receiving country, it is a monumental loss to the developing country with the effect that the grim development challenges facing these countries are made grimmer. Nigeria's manpower dilemma is attributed to brain drain. For instance, between 2000 and 2005, Nigeria reportedly lost 21,988 health workers to brain drain. ([http://www.andnetwork.com/app?service/0/Homes/\\$StorySummary\\$0.\\$DirectLink\\$2&sp=127830](http://www.andnetwork.com/app?service/0/Homes/$StorySummary$0.$DirectLink$2&sp=127830)). There is no doubt that educational attainment of the population plays a critically important role in national development trajectories. This point underpins the various immigration strategies of the West aimed at attracting the very best educated personnel from Africa and elsewhere. Therefore, despite the seeming inadequacy of skilled and professional manpower in Nigeria, the few that underwent training using up scarce state resources for their training were mopped up by the developed countries. The implications of this are: first, investments in education in Nigeria may not lead to faster economic growth if a large proportion of its educated populace leave; secondly, efforts to reduce specific manpower shortages may be futile unless there are incentives that discourage emigration.

These manifestations of the effects of the brain drain do not constitute the entire picture. Other negative effects of brain drain which have stymied Nigeria's vision to translate its potentials to actual greatness include the disappearance of a critical mass of professionals to spearhead the coordination of researches, the delivery of public services (notably health and education) and the manning of political institutions; and fiscal losses due to foregone revenues from public investment in the human capital of those who emigrate (Batista, Lacuesta and Vicente 2007:3).

There is little doubt that brain drain has been quite extensive with regards to the number of émigrés and the effects that emigrations have had on the Nigerian economy. The UK National Health Service in acknowledgement of "proxy vandalisation" of Africa's health sector rescinded its policy of active staff recruitment from sub-Saharan Africa in 2001. Both the British Medical Association (BMA) and the Royal College of Nursing considered the move of the UK National Health Service as a "strong moral lead" worthy of emulation by other developed countries (Clemens and Petterson 2006:2). In spite of the open admission of human resource vandalism by the developed countries, they have continued to evolve soft policies to attract highly skilled personnel. According to Clemens and Petterson (2006:5-6), OECD countries of UK, US, France, Australia, Canada, Portugal, Belgium and Spain account for 94.2 per cent of all African-born, university-educated people in 2000".

It is not only in the health sector that the debilitating effects of brain drain manifest; it permeates every sector of the economy. The brain drain phenomenon in Nigeria inhered from

the causative agency of economic stagnation. Yaqub (2007:2) notes that:

The sudden collapse of the [Nigerian] economy refracted equally and most dramatically into the universities, among other services provided in the social sector of the economy. The consequence of this development led to.... the worst aspects of the phenomenon of brain drain whose impact has been with the universities, virtually since then till date.

The institutions (universities, research institutions and other citadels of learning) which would have been in the forefront of capacity building were themselves swallowed in the eddy of economic and political contradictions that enveloped Nigeria in the 1980s (Yaqub 2007:2). It was not just the remunerations of the academics that were rendered inadequate by the plummeting Naira (Nigeria's currency), budgetary allocation to the universities shrank making it practically impossible to procure basic teaching tools and materials as well as engage in researches as grants were not forthcoming.

Oni (2000:2) underscores the importance of education in the overall schema of development when he asserts that the advancement of the developed countries has been dependent on aggressive development of both human and institutional capacity. Universities, research centres, industries, foundations and the government play a critical role in the institutionalisation of capacity-building. The pervasiveness of poverty as well as economic stagnation in Africa and the recent rapid economic development of countries of South East Asia are contrastingly reflective of their deliberate policies on human capital building and sustenance. Therefore, the poaching of developing countries' manpower not only eroded the basis of their development but stymied their development prospects. The prevalence of this trend led to the conclusion in extant literature that developing countries have been unwittingly subsidising the manpower needs of the developed countries (Yaqub 2007:4).

All over the world, investment in education especially at the tertiary level constitutes a critical component of national development efforts. While Africa and indeed Nigeria make efforts at human capacity building they lack the requisite conducive economic environment to retain them within the country. Citing relevant data records, Obasi (2006:5) informs that:

The estimates by the UN Economic Commission for Africa and the International Organization for Migration (IOM) show that 27,000 African professionals left the continent from 1960 – 1974. The figure rose to 40,000 from 1975 to 1984. Again, this rose to 60,000 from 1985 to 1989. And since 1990, it is estimated that at least 20,000 professionals leave the continent annually.

The same trend characterised Nigeria. It was estimated that prior to 1996 over 21,000 Nigerian medical doctors were practising in the United States alone. Other estimates put the number of Nigerian doctors working in OECD countries at 4,611 and nurses at 13,398 (Oyowe 1996; Hovy 2010:10-11). What this means is that Nigeria's capacity to compete globally is undermined since its army of skilled work force is sucked into the developed countries and is thus used to satisfy their manpower needs. And since knowledge is power, their continued domination of the world to its detriment is assured except a policy is evolved to harness them. As Udoh (2011) has observed, "Nigerians have excelled in health-care delivery system, in engineering, in information technology, in law and politics, in virtually all the professions that have cutting edge or best practices here in the United States and elsewhere". But, this world-wide success of the Nigerian diaspora appears not to reflect in Nigeria's domestic arena. The absence of the Nigerian diaspora in national development calculations has thrown up certain socio-economic contradictions. One, Nigeria's investment in manpower development continues to service the developed economies; and two, non-integration of highly-skilled diasporan human resources for domestic development creates the paradox of penury in plenty. At the core of the alienation of the Nigerian diaspora in national development is the absence of policies and platforms to facilitate vital cross-pollination of ideas necessary to engender development through their input.

The isolated effects which the brain drain has on Nigeria are: the exacerbation of its underdevelopment and the stifling of the prospects of economic development. This is so because informed projections postulate that "every year there are 20,000 fewer people in Africa to deliver key public services, drive economic growth, and articulate calls for greater democracy and development (Sriskandarajah 2005b). And Nigeria constitutes a large chunk of this figure. Considering the multiplicity of factors that underpin brain drain, it is difficult to evolve a universal strategy to roll it back. Generally, migration or brain drain has both positive and negative attributes. It is only when it is properly contextualised that its overall effects could be determined. And such contextualisation must have within its purview the complete picture to enable a valid conclusion. As Sriskandarajah (2005b) opines:

... Brain drain can only tell part of the story about migration's overall impact on an economy or society. When all other impacts of migration – such as remittances, inward investment, technology transfer, increased trade flows, and charitable activities of Diaspora communities – are taken into account, the net impact may actually be positive.

The effects of brain drain on countries are not uniform but according to their special circumstances. Several peculiar domestic factors determine whether out-migration is pernicious or benign. Such countries as India, China, Philippines and Mexico which have a large pool of skilled personnel consider overseas outlets for their citizen as desirable and, therefore, have institutional frameworks to harness and facilitate emigration. Under this circumstance therefore, these countries are merely deploying their excess human resources abroad to fetch higher value for both the individual and the country. The same scenario does not conduce to the Nigerian situation. Brain drain poses critical development challenges as it symbolises the shearing off of Nigeria's limited human resources. While conceding to Sriskandarajah (2005b) that brain drain is not always negative as some migrants often return with greater skills, remit money back home or in some cases motivate citizens to acquire higher skills and education, yet the logic of brain drain is premised on the well-being of recipient countries. Whatever the sending country gains is incidental and therefore of inferior value. And such gains are only possible when "brain gain" is greater than the "brain drain".

### **3.3 NIGERIA'S DOMESTIC MILIEU AND KEY DRIVERS OF BRAIN DRAIN**

The brain drain phenomenon in Nigeria is not attributable to, nor driven by, a single factor. Several factors act as push factors. The periodisation of brain drain in post-independence Nigeria coincided with the manifestation of certain systemic contradictions such as structural defects, institutional distortions and infrastructural inadequacies. These factors combined to limit the capacity of the Nigerian State to meet its obligations to the people. The structural defects that characterised the Nigeria economy consisted of unhealthy ethnic rivalry, skewed federal system and undiversified, monolithic and monocultural production bases, which oscillated from the production of agricultural produce and exploitation of solid minerals in the 1960s to exclusive reliance on oil as the country's major export earner since the 1970s. The institutional distortions which plagued the Nigerian state included weak institutional capacity for economic policy management and coordination among the tiers of government, debt overhang and erosion of national economic sovereignty, macroeconomic policy inconsistencies, political instability, public sector dominance in production and consumption, incapacity to manage ethnic tensions and the frequent eruption of violence, and corruption. The infrastructural inadequacies which limited the capacity of

Nigeria and thus worsened the health of its economy included constant power outages as a result inadequate generation and poor distribution of electric power; bad road networks across the country, moribund rail system, poor healthcare delivery system and collapse of social services (Nwozor 2006:154). All these contradictions underpinned the push factors that prepared the ground for the sustained mass emigration of Nigeria's highly-skilled manpower. On their own and separately, the already identified systemic flaws in the Nigerian economy did not automatically result in the mass emigration of highly-skilled Nigerians. It was the greater interplay of these factors, with their constriction on the capacity of this category of Nigerians to practice their professions and enjoy good life therefrom, that induced brain drain.

The internal dynamics which motorised brain drain in the Nigerian state can be categorised into four phases: the first phase was the period of high-level political turmoil that pitched the nascent political class in the struggle for supremacy and control of state apparatus of power. The struggle for state power amongst the political elite unleashed violence and political instability that reverberated around the country. Ake (1981: 126) attributes the underlying motive for the ensuing struggle for political power to the high premium attached to its acquisition as a result of its manifold utilitarian value. Therefore, political power in the post-independence Nigeria became the easiest way to accumulate wealth as well as the means to acquiring larger-than-life profile through the exclusive power it confers on power brokers and government functionaries to dispense state patronage. An interesting feature of the Nigerian state is its synonymousness with the ruling class and the use of the state to prosecute the class war in favour of the ruling class. It was this struggle that snowballed into the Nigerian civil war with millions of fatalities. The humanitarian crisis resulting from the war and the fear of state reprisal opened the gate for the mass emigration of Nigerians, especially from the war-ravaged section. Indeed, despite the Nigerian government's avowed official policy of reconciliation, reconstruction, and rehabilitation, otherwise referred to as the "three R's" and the declaration of "victor, no vanquished", the unofficial policy of the Nigerian state was a surreptitious stigmatisation and marginalisation of the people of Eastern Nigeria particularly, the Igbo ethnic stock. The Igbos were not only estranged from the mainstream of Nigeria's socio-economic and political sphere, they were immobilised economically as their life savings were punitively seized by the Nigerian state in exchange for twenty pounds irrespective of the worth of their savings (Ukaogo 2010:12). The effect of this was the evolvement of new migratory orientation.

The second phase was the post-oil boom period, which was characterised by reversal in Nigeria's economic fortunes and contractions in government budgetary allocation. Three issues defined this phase. One was the crystallisation of the trajectory of the Nigerian economy to monoculturalism. Prior to this phase, Nigeria enjoyed a relatively high standard of living as it depended on a bouquet of primary commodities such as groundnut, cocoa, rubber, palm oil, timber and such solid minerals such as coal and tin. The good run of oil prices as a result of OPEC intervention led inexorably to the abandonment of multiple streams of foreign exchange earnings through primary commodities to total dependence on oil. Two, the expansion in Nigeria's foreign exchange earnings in the period of oil boom was not judiciously invested. Nigeria's foreign exchange earnings rose exponentially from a few hundred million Naira to ₦4.733 billion in 1975 and ₦15 billion in 1980 (Nwozor 2005:141). It was estimated that between 1973 and 1981, Nigeria earned over US\$ 60 billion from oil (Ikpeze 2004:6). Expansion in Nigeria's foreign exchange earnings led to expansion in elite accumulative tendencies. As Olukoshi (1990:84) avers, "the huge amount of petrodollars accruing to the state led to an unprecedented expansion in public expenditure. From ₦8.258 billion in 1975, state expenditure rose dramatically to ₦13.281 billion in 1979 and ₦23.695 billion in 1980". So, despite Nigeria's phenomenal earnings, it became indebted to multilateral financial institutions, Western countries and consortia of banks in Europe and America. The genesis of Nigeria's debt entrapment was the first jumbo loan it borrowed in 1977 and a second one in 1978. The jumbo loans were immediately filtered away as a result the skewed expenditure pattern that was overly consumptive. Gen. Obasanjo's regime contracted the loans in tranches of ₦600 million (US\$1 billion) and ₦734 million (US\$1.456 billion) (Nwozor 2005:139). Pockets of indiscriminate borrowings by both the federal and state governments in an effort to keep up with, and bridge the yawning gap, between Nigeria's foreign exchange earnings and the burgeoning recurrent expenditure profile led to economic crisis. Three, Nigeria's indebtedness robbed it of its economic sovereignty and led to the active intrusion and control of its economy by the international financial institution (IFIs) especially, the IMF and the World Bank.

The third phase was the era of economic and social turbulence occasioned by the imposition of economic reforms. As a result of Nigeria's unsustainable debt profile, its capacity to meet its international financial obligations was compromised, thus, unleashing the IFIs on its economic sphere with all manner of reform packages. According to Nwozor (2005: 139), Nigeria's debt rose to US\$8.9 billion in 1980 and US\$29.00 in 1992. Three factors combined to create contradictions in the Nigeria economy: one, the ever-expanding

debt profile with its equally expanding debt service obligations; two, the slump in the international price of oil; and three, the unhealthy and unsustainable expansion in public expenditure. To address the gradually unfolding scenario for economic crisis, the IFIs recommended economic stabilisation strategies whose inefficiency in stopping the further deterioration of the Nigerian economy gave way to austerity measures. By 1986, Nigeria introduced the Structural Adjustment Programme (SAP), which had far-reaching detrimental effects on its economy. Apart from its economic backlash on all sectors of the Nigerian economy, SAP spawned social turmoil, which was a reaction to its effects on the standard of living of the people. In the two decades preceding the implementation of the SAP conditionalities, the Nigerian state had devoted substantial resources to the social sector especially in the areas of health, education and infrastructural development. Government at all levels invested in primary, secondary and tertiary health facilities and collaborated with UNICEF, WHO and other international organisations in the provision of healthcare services in such areas as preventive health and disease control and eradication. In the education sector, substantial success was recorded in the levels of school, numbers of schools and the high quality of their products as the government initiated universal free primary education as well as expanded access to education. But SAP's emphasis on drastic reduction in social services spending created contradictions and reversals in the gains had been recorded in social service delivery. UNICEF alarmingly demanded for a SAP with a human face. In the same vein, the Economic Commission for Africa (ECA) proposed an African Alternative Framework to Structural Adjustment Programmes for Socio-economic Recovery and Transformation with emphasis on adjustment within a longer term developmental perspective, human resource development and the maintenance and improvement of social services (Adepoju 1993:4). In 1987/88, UNICEF published two volumes dedicated to drawing attention to the negative effects of SAP, especially the deepening of poverty in the countries implementing it. UNICEF pointed out two factors which had prevented sustained growth namely, deflationary nature of most adjustment programmes, which reduced demand, depressed employment and real incomes; and, the direct negative effects of some macro-economic policies, particularly those relating to cost-recovery programmes, abolition of subsidies on essential commodities, cuts in social expenditure and the liberalisation of exchange controls, on vulnerable groups, such as the poor and those on fixed employment (Zack-William 2000:69). The most detrimental conditionality of SAP was the devaluation of the Nigerian currency, the Naira. Through the instrumentality of the Second-Tier Foreign Exchange Market (SFEM), the Nigeria Naira, which was supposed to be devalued by 60 percent, had a free fall and was

instead devalued by as much as 500 percent. The implication of the unprecedented devaluation of the Naira was its direct impact on Nigeria's debt profile. Since Nigeria must pay its debt obligations in Dollars, it meant that it must source for more funds to meet the same obligations it had hitherto met (Gana 1990:99). The SAP era saw the reversal of the little national progress made in the preceding decades. In deference to SAP conditionalities, the Nigerian state drastically reduced or stopped budgetary allocations to social services. Such sectors as health and education were worse hit as their infrastructure began to decay and thus, became unsupportive of world class services. An unfortunate effect of SAP was the desiccation of the middle class whose salaries seemingly became inadequate to cater for its needs. Lack of conducive operational environment in the face of grossly inadequate salaries and the absence of redemptive policies to redress the fallout of SAP created the conditions for the redefinition of the boundaries of patriotism by Nigeria professionals.

The fourth phase coincided with the era characterised by political instability, political intolerance and ascendancy of autocratic rule with sit-tight tendencies. The economic contradictions characterised by the erosion of Nigeria's sovereign control over its economy combined with the hostile political climate to deepen the distrust and lack of faith amongst Nigerian professionals to continue to remain at home. Hagher (2011:122) captures it succinctly.

The middleclass was wiped out by Babangida's anti-people decrees. University lecturers and professionals could no longer feed their families and lived in fear as the military and the dreaded SSS [State Security Service] became a state instrument of coercion and brutalization.

The re-interpretation of patriotism in this phase consisted in the survivalist search for greener pastures despite the development challenges that faced, and still face, the country. This phase was marked by widespread human right abuses, the height of which was symbolised by the state execution of world-acclaimed environmental rights activist, Mr Ken-Saro Wiwa; the imposition of wide-ranging sanctions on Nigeria by the international community; the designation of Nigeria as a pariah state with far-reaching implication on opportunities for Nigerian professionals; and, the stultification and truncation of political rights of Nigerians as exemplified by the annulment of June 12 1993 presidential election. Ken-Saro Wiwa's statement before he was extra-judicially executed by the General Sani Abacha regime in November 10, 1995 captures the far-reaching implications of the persistence of injustice and abandonment of due process in the governance of the country thus:

We all stand on trial, my lord, for by our actions we have denigrated our country and jeopardized the future of our children. As we subscribe to the subnormal and accept double standards, as we lie and cheat openly, as we protect injustice and oppression, we empty our classrooms, degrade our hospitals, and make ourselves the slaves of those who subscribe to higher standards, who pursue the truth, and honour justice, freedom and hard work (cited in Nigerian Times 2005).

The internal dynamics within the Nigerian political economy created specified conditions that acted as push factors for emigration. They include among others:

- a) Internal economic crisis;
- b) Religious and ethnic crisis;
- c) War and civil unrest;
- d) Political instability;
- e) Private and public corruption that
- f) Lack of basic infrastructure.

The introduction of SAP with the devaluation of the Nigerian currency worsened the inherent contradictions in the economy. At the core was its incapacity to provide meaningful economic bases to sustain the means of livelihood of its teeming highly-skilled manpower. In the private sector, most companies' warehouses were filled with unsold inventories, and being unable to maintain profitability, they began to rationalise their workforce and in extreme cases, closed down. The story was the same in the public sector as the government at all levels not only downsized their work force but also imposed embargo on employment. The Federal Government underpinned its labour policy on the philosophy of lean workforce. The combined effect was massive unemployment and institutionalisation of poverty. Poverty levels in Nigeria rose from 27.2 percent in 1980 to 46.3 percent in 1995. By 1996, the level of poverty in Nigeria was an all time high of 65.6 percent.

**Table 3.1: Trends in Poverty Level (1980 - 2004)  
(Percentage)**

<b>Year</b>	<b>Poverty Level</b>	<b>Estimated Total Population</b>	<b>Population in Poverty</b>
1980	27.2	65 million	17.7 million
1985	46.3	75 million	34.7 million
1992	42.7	91.5 million	39.1 million
1996	65.6	102.3 million	67.1 million
2000	70.0	115.2 million	80.6 million
2004	54.2	129.9 million	70.4 million

*(Source: NBS 2009:73; CBN 2004:106)*

Unemployment and high level of poverty effectively dismantled the Nigerian middleclass, thus, destroying the last bastion of solidarity against mass emigration. One by one, highly-skilled Nigerians began to leave the shores of country until the core sectors of its economy including the health and education sectors became empty. Even those who were not affected by the rationalisation policy had to contend with low wages and salaries whose purchasing capability had been grossly eroded. The devaluation of the Nigerian currency, which was at par with the United States Dollar prior to the introduction of SFEM, meant that workers' salaries were effectively devalued. Nigeria's budgetary allocations to the health and education sectors plummeted sharply that professionals in these sectors were in a quandary about how to discharge their statutory obligations. While the budgetary allocation for health fell short of the five (5) percent of national budget advocated by the World Health Organisation (WHO), as per capita allocation to health was US\$0.62, the education sector fared worse (Adepoju 1993:56).

The devalued salaries of University academics and lack of funding to the education sector combined to create a sense of occupational despair. For one, academics were no longer able to access journals and other publications necessary to stay on top of researches. The same thing applied to health professionals. For another, these professionals, being integral members of the society with roles and responsibilities, were unable to meet their societal obligations (Hagher 2011:122; Ihonvbere 1994:84). And lastly, the traumatising existential conditions characterised by disequilibrium between needs and means further eroded whatever was left of the dignity of a broad section of professionals including academics. Many entered the survivalist race by engaging in seemingly undignifying jobs like converting personal cars

to taxis, and in the academic, churning out half-baked compilation of handouts and forcing students to buy same (Yaqub 2007:7).

The failure of the Nigerian state to address the economic crisis that was steadily expanding its cross-class pauperisation from the 1980s created unrest in the polity. Industrial unrest between trade unions and government on the one hand, and between trade unions and the organised private sector (OPS) on the other, became a new weapon of negotiation for better conditions of service. The response of the military regimes was equally a hard-line stance of intolerance. Hagher (2011:121) has attributed the factors that engendered mass social action against the Nigerian government to the people's perception of the government as insincere, widespread corruption, mass poverty and nepotistic empowerment of political allies and cronies in mockery of greater good. Despite the sustained social action by Academic Staff Union of Universities (ASUU), Nigerian Labour Congress (NLC), National Association of Nigerian Students (NANS) and other unions, neither the condition of the people nor that of the state improved substantially.

The high level of political instability and the culture of impunity, which pervaded the polity induced fear amongst the professionals. The academics were haunted and hounded by the military juntas as a grand strategy to cow them. They were understandably feared and hated by the military oligarchs because of their strategic importance in interest articulation and aggregation within the polity. The academics (under ASUU) and indeed other professionals under other civil organisations and unions were rightly recognised as the melting cauldron of ideas that might be antithetical to the dominant interest of the military and their allied political class. In actuality, ASUU and other organisations checkmated the seeming excesses of military regimes in terms of inappropriate and anti-people policies. Ihonvbere (1994:82) explained the anti-intellectualism of successive Nigeria governments thus, "Nigeria has, never really been blessed by leaders who have experienced, and who understand, the true value of education and dynamic role of higher institutions in the process of national mobilization, development and emancipation". The premise for this assertion was the fact that until the election of late President Umaru Musa Yar'Adua in 2007, no Nigeria leader (military or democratically elected) was a university graduate. The unhealthy political environment which manifested in the usurpation of the university autonomy, the withdrawal of academic freedom, the contraction of the political space and the proliferation of anti-human rights decrees facilitated mass exodus. The broad issues of legitimacy which successive military regimes had to contend with imbued them with crude survivalist

disposition that found scapegoat in academics. Other push factors within the education sector have been identified as:

Unprecedented massacre of students; the unparalleled detention of students and academics; the frequent imposition of vice-chancellors and unrepentant support for corrupt, inefficient, and unpopular vice-chancellors; massive cuts in university funding; the abolition of research grants, scholarships and bursaries to faculty and students; frequent and confused changes to the school calendar; the attempt to monitor teaching and research to put it in line with the conservative and reactionary policies of the IMF and the World Bank; the deterioration of libraries, infrastructures, research facilities and laboratories; and the incorporation of academics into programmed system of subservience to imperialism, corruption, manipulation, and waste (Ihonvbere 1994:83-84).

Added to the growing incapacity of the education and health sectors as a result of poor funding and crisis of autonomy were issues relating to career/job satisfaction and career growth. Yaqub (2007:6) explains that in the face of eroded purchasing power of the academics as well as absence of research grants and empty libraries, the academics whose career progression depended on researches and number of publications faced added challenge, unlike their counterparts in the non-academic sector. This condition gave rise to two scenarios: brain drain and brain waste. Yaqub (2007:7 - 8) captures the response thus:

The culmination of the shortages in funding and the simultaneous expansion in student enrolment who had to contend with a variety of shortages in accommodation, classrooms, inadequately stocked libraries, etc., led to lower morale among the staff and those who felt that enough was enough exited from the academics, either to overseas universities or found a niche in the domestic economy.

Insecurity and constant security crisis around the country also acted as a push factor. Insecurity in Nigeria has always manifested in a number of ways especially, in the form of ethnic rivalry, religious intolerance or bigotry and political crisis. Apart from the Nigerian civil war which had the imprimatur of ethnicity and driven by the quest for separate statehood, Nigeria's socio-political landscape is littered with intra-and inter-ethnic "wars". The Ife – Modakeke and the Aguleri – Umuleri, among many others in almost every part of Nigeria, formed examples of intra-ethnic wars. Conflicts (inter-ethnic, religious and political) seem ubiquitous in Nigeria, but more so in Northern Nigeria where it has assumed the rule

rather than the exception. For instance, there are constant pockets of religious crisis and inter-ethnic conflicts pitching the Tiv and Jukun whose territories stretch to and covers Benue, Nasarawa, Plateau and Taraba states; the Zango and Kataf in Kaduna state; the Tiv and Azara in Nasarawa state; the Bassa and Igbirra in Nasarawa state; the Hausa-Fulani (Jasawa) and indigenous tribes of Afizere, Anaguta and Berom in Plateau state, amongst others. There is also undefined terrorist war engaged by the Boko Haram Islamic sect in Northern Nigeria that has led to the premature death of thousands of people. These conflicts have had far-reaching effects. They created and still create: one, insecurity in the polity; two, serious humanitarian crisis as a result of the displacement of the people. According to Albert et al (2003:224), not less than 18,910 persons excluding children, were displaced in the Ife – Modakeke conflict between 1997 and 1998. Three, they engendered and sustained tension which was, and still is, antithetical to meaningful socio-economic activities. Armed with the international reportage of these conflicts, many highly-skilled Nigerians also joined other categories of labour-migrants to seek for greener pastures abroad through the normal channel, or through application for asylum or refugee depending on the easiest options.

Political instability also acted as push factors. Nigeria's political development is filled with tension and instability. Since Nigeria's independence, its political terrain has been volatile: it recorded six successful military coup d'états since 1966; countless unsuccessful coup attempts; and, four republics depicting distinct democratic transitions, some of them violently truncated (1966, 1983 and 1993). Throughout the military era (1966 – 1979; 1984 - 1999), various military regimes intensified the political tension with arbitrariness, intimidation and official recklessness. At every point, opposition to government policies was greeted with arrest, torture and even death. As Babawale (2007:20) avers, "protests in response to harsh economic realities by workers and students in 1988, 1989, 1991 and 1992 were met by official repression". The most prominent event that intensified the emigration of Nigerian professionals was the annulment of June 12, 1993 presidential election which was presumed to have been won by the Late Chief Moshood K. O. Abiola of the Social Democratic Party (SDP). The annulment was interpreted both in class and ethnic terms. The strategies employed by the Abacha regime to safeguard its seeming tenuous hold on power included, the promulgation of decrees outlawing legitimate demands, demonization of opposition, arbitrary arrest and imprisonment, extrajudicial execution and hired assassination. Both the intelligentsia and other high-skilled professionals who had formed a vanguard against political injustice became targets of government sponsored assassination plots. The dangers to personal safety led many to flee into exile and others to permanently relocate.

### **3.4 INTERNATIONAL IMPETUS TO MIGRATION AND BRAIN DRAIN**

The impetus for brain drain in Nigeria is locatable in the systemic contradictions in the domestic economies and the international incentives from the developed countries. This impetus for outward migration has been conveniently compartmentalised into pull and push factors by scholars (Dovlo 2003:4, Dzimbo 2003:1-3). The push factors depict domestic contradictions that created the necessary excuse for highly skilled professionals to emigrate and the pull factors, on the other hand connote the conducive circumstances in the developed countries that attract and integrate skilled personnel in their economies to maintain their lead in the global area. Dzimbo (2003:3) asserts that while economic, political and environmental considerations shape push factors, it is only economic considerations that induce pull factors. The point being emphasized, therefore, is that the policies put in place in the developed countries are first and foremost stimulated by such economic permutations that continue to guarantee their supremacy in the global economic system. But those compartmentalisations do not tell the entire story nor convincingly account for complex circumstances that drive brain drain. Indeed there are other forces that shape brain drain outside the framework of orthodox typologies of pull and push factors. These include suction factors and global systemic factors.

No doubt, the economy of Nigeria is such that its absorptive capacity in spite of its potentials is limited. The implication of this is that the likelihood of not realising one's full potential in one's profession as a result of systemic inadequacies is more real than imagined. Brain drain is intricately linked to the nature of capitalist relationship in the world system. As Ghosh (2001:42) puts it:

The problem of brain drain was generated and intensified by the deliberate neo-colonial policy of developed capitalist countries. The exploitation by these countries continues unabated, but in a different fashion. In the pre-industrial revolution period, the developed countries took away resources from their colonies in the form of physical capital; while in the post-industrial revolution period they have been draining the human capital resources from LDCs.

Pull factors refer to those conditions that attract high quality manpower (HQM) from labour-exporting to labour-receiving countries. Expectedly, the factors that push the HQM from developing countries are the same factors that pull them to the developed countries. In other words, these pull factors are not products of fortuitous circumstance but of capitalist

calculations that are motorised by exploitation. These pull factors have been identified to include:

- (a) Better economic prospects;
- (b) Higher salary and income;
- (c) Better level of living and way of life;
- (d) Better research facilities;
- (e) Modern educational system and better opportunity for higher qualifications;
- (f) Relative political stability;
- (g) Intellectual freedom (substantial research funds, rich scientific and cultural tradition);
- (h) Better working conditions and employment opportunities;
- (i) Technological gap (<http://en.wikipedia.org/wiki/Emigration>; Shinn 2002;

Nunn 2005:8).

The compartmentalisation of the factors that instigate brain drain into push and pull factors does not completely appreciate the complexity of the global and capitalist system and the unending war of ascendancy that characterise relationship within its fold. These push – pull categorisation appears to gloss over the main underlying cause of inequality in the global system, and which is the core reason for the unidirectional nature of brain drain. While the typologies of brain migration advanced by Ghosh (2001:41) may be useful in the general examination of labour movements, it is brain drain that best exemplifies and appropriately situates the mass exodus of skilled personnel from Nigeria and Africa to the developed world. Ghosh (2001:41) has grouped the various brain migrations into: brain drain, brain overflow; brain exchange and brain export. While the brain migration from certain countries of the Third World especially Philippines, Mexico and India might be accorded any or all of these typologies, African experience in terms of brain movement to the developed countries is essentially brain drain.

The pull – push factors must be extended to fully appreciate the forces that shape and sustain brain drain. The various domestic policies put in place in developed countries to attract and retain sorely needed external manpower constitute strong forces that induce brain drain. We choose to categorise these forces as suction factors. The intention of western policies is to “suck out” skilled professionals from Africa for their domiciliation in the developed countries where their skills would contribute to the expansion of their global dominance. Other strategies include:

- (i) Scholarships (doctoral and post-doctoral fellowships);
- (ii) Reducing the immigration bars /favourable immigration laws and policies;
- (iii) Positive labour conditions including favourable tax deals and unrestricted remittances.

There are also global systemic factors that keep Africa and other Third World countries at the fringes of the global capitalist system. They use such mechanisms as:

- (i) The Debt peonage;
- (ii) Economic reforms;
- (iii) IFIs (especially IMF loans and conditionalities);
- (iv) Technological gap (aided by intellectual property rights).

The relevance of these new typologies is that they capture the surreptitious and deliberate policy thrust of Western countries as they directly impact on the trajectory of brain drain. The greatest analytical weakness in the bifurcation of the forces that shape brain drain into push/pull categorization is that it only explains what is, that is, the obvious manifestation of the effects of brain drain without addressing the complex interplay of “behind the scene” manipulations that induce and sustain it. Dzvimo (2003:2) has also criticised push – pull framework as focusing principally on personal variables and failing to offer explanations to the variance in size and direction of migration flows as well as “why sources of migration concentrate in certain regions and the distinction between macro and micro-structural determinants of migration”. The suction factors and global systemic factors generally address these concerns raised by Dzvimo (2003:2).

Since the 1980s, the developed countries had systematically evolved new policies that dismantled the restrictive and discriminatory immigration laws that tended to shut out the Third World in their countries. The need for this “lenient” review had nothing to do with philanthropism or to assuage the threatening economic crisis that was encroaching on the Third World economies especially Africa. Rather, it was informed by the need to harvest the expected fallouts from the economic crisis that characterised African and Third World economies. All over the developed countries, different models of immigration policies were put in place: there were point-systems in Australia, Canada and UK; the H1-B Visas in the US, German Green card, European Blue Card, French immigration “choisie”. The idea behind these myriad immigration policies was to cushion labour shortages arising from higher rate of life expectancy in the midst of low birth rate in developed countries. According to demographic estimations,

Africa has, and is projected to continue to have, a relatively young population, while that of Europe is projected to become much older over time. While large numbers [of] Africans will be looking for work, large numbers of Europeans will be in need of services and support during their old age (Nyarko 2010:11).

The increasing rate of population growth in Africa and its youthful composition made Africa a vestibule of abundant labour power. But for African labour to be deployed willingly and voluntarily, the domestic conditions must be made uncondusive. It is only when domestic conditions are uncondusive that emigration can take place as exemplified by the reaction of Africa's middle class to the economic crisis that spawned the contemporary wave of emigration. That explains why the structure of the modern world system has defied attempts at restructuring to evolve a new international economic order; the uncompromising and hard-line stance of IFIs on economic reforms and the increasing contraction of ODA flows to African countries.

The reforms in the immigration policies of western countries represented attempts to proverbially kill two birds with a stone: one, ensure the influx of the right calibre of skilled people to fill vital vacancies as well as maintain a sizeable pool of unskilled personnel; and two, attract foreign capital for investment through emigrants. The EU Blue Card scheme appears a quintessential futuristic stratagem of the European countries to put in place a structure to address human capital deficits in their economies. The EU Blue Card scheme is a European Union work permit that confers privileges on high-skilled non-EU citizens to reside and work in the EU countries. Currently, Denmark, Ireland and UK are excluded from this treaty having not acceded to it. The EU Blue Card represents a one-track as well as liberal procedure for non-EU citizens to apply for a work permit that has a duration of between one and four years with options for renewal. The Council Directive 2009/50/EC of 25 May 2009 stipulated 19 June 2011 as date for the commencement of the implementation of this immigration policies (Official Journal of the European Union 2009:L155/29). The 25- Article Directive specifically set out the parameters for the qualifications of the target of the scheme. Article 2 which dealt with definitional issues specified that the beneficiary of the EU Blue card would be a person possessing higher education qualification with the required adequate and specific competence in accordance with national employment law (Official Journal of the European Union 2009:L155/21). Part of the high points of the Blue Card is that it is renewable with possibility of permanent residency. Holders of the Blue Card are expected to enjoy the same social and labour rights as the citizens of the receiving country, rights of

family unification as well as geographic mobility (that is ability to move from one country to another within the EU). The EU Blue Card does not pretend that it keeps the interest of the human capital-exporting countries within its purview. It only made a perfunctory plea that:

In implementing this directive [EU Blue Card scheme] member States should refrain from pursuing active recruitment in developing countries in sectors suffering from a lack of personnel. Ethical recruitment policies and principles applicable to public and private sector employers should be developed in key sectors, for example the health sector, ...and education sector, as appropriate (Section 22 of Council Directive 2009/50/EC)

There was no documented strategy of actualising this besides the provision in Section 24 of the Council Directive 2009/50/EC that:

Specific reporting provision should be provided for to monitor the implementation of this directive, with a view to identifying and possibly counteracting its possible impacts in terms of “brain drain” in developing countries and in order to avoid “brain waste”.

The inherent deception in the assertion of the EU is the fact that the Blue Card scheme was, first and foremost, birthed as mechanism to attract high-level skill. And there is no established threshold over and above which countries could not engage third country high-skilled personnel. Countries are at liberty to recruit according to its needs. Since 2008, the UK introduced and operated points-based system (PBS), a departure from the work permit and highly skilled migrant scheme it operated prior to this period. Points-Based system (PBS) structures the immigration services into tiers. These tiers represent the categorisation of people according to their academic attainment and skills acquired in the course of their professional practice. Canada was the first country to adopt a points-based immigration system, having done so in 1967 (Weiner 2007).

The system works in such a way that visa applicants only need to score certain number of points based on academic qualification, job experience, profession, available funds, language, age and so on, to be considered eligible to migrate to Canada and be given work permit. According to Weiner (2007), all an applicant needs is to score some 67 points based on the criteria already enumerated above. Points-based systems (PBS) have been adapted in other countries such as Australia and UK with certain modifications. While an applicant who could invest US\$100,000 in government-sanctioned projects in Australia

received additional points that would enhance their chances, in UK graduates of the top 50 business schools around the world automatically qualified for work permit. The UK PBS is structured into five tiers: the first tier is classified “highly skilled” and covers such professionals as scientists or entrepreneurs, the second tier is categorised as “skilled” consisting of nurses, engineers, teachers etc; Tier 3 contains “low skilled” workers, Tier 4 covers “students” and Tier 5 consists of “temporary migrants and workers”, for example, working holiday makers and artistes for scheduled performances. It also covers youth mobility schemes. The US diversity immigrant visa (Green card lottery) which makes available 50,000 permanent resident visas annually has also kept the door open for vital human resource needs of the US.

The danger in the immigration policies of the developed countries to Africa is two fold: the mindless exploitation of the human resources of the African continent as well as the encouragement of capital flight. Both of these effects have serious implications for African and Nigerian development. Migration Watch UK (2010) has noted overall increment in the number of immigrants from non-EU countries by 20% (<http://www.migrationwatchuk.org/pressReleases/03-June-2010>). Although there was no breakdown of the 20 percentage increment in the immigration population to enable an appreciation of African contribution, the point is that the immigration policies of the developed countries were fashioned to poach vital African human resources. This, therefore, has complex and far-reaching implications for Africa’s development.

Beside the EU Blue Card, France adopted “immigration choisie” policy to sieve the influx of immigrants in order to tailor them to its needs, ensure mandatory integration for long-term residents and co-development (Chou and Baygert 2007:2). The concept of co-development indicates partnership with third countries. Such partnership is in the mould of encouraging reverse-migration. As Sarkozy, the then France’s Minister of Interior explained, “young foreign graduate students who obtain their masters degree in France will be able to enhance their education with a first professional experience in France before their return to their country of origin” (cited in Chou and Baygert 2007:6). These needs consisted of the lacuna in the manpower needs of France. According to the proposition by the Ministry of Economy, the French labour market could face 750,000 recruitment needs each year after 2015 (Bertossi 2008: 5).

Immigration choisie (chosen immigration) passed through the instrumentality of two laws in 2006 and 2007 and represented a migration policy that tended to choose the “good” migrants as well as shape migratory flows (Bertossi 2008:5). The “good migrants” targeted

by this immigration policy are only good because of their utilitarian value in filling shortages in the labour market for certain sectors. Year after year, Africans constituted the highest percentage of beneficiaries of the US Diversity (DV) lottery. Out of 96,690 shortlisted winners for 2008 edition of the DV lottery, Africa was allotted 52,824 representing 54.63 percent. The same trend was recorded in the 2010 DV lottery where Africa netted 52.63 percent of the visas ([http://en.wikipedia.org/wiki/Diversity\\_immigrant\\_Visa](http://en.wikipedia.org/wiki/Diversity_immigrant_Visa)).

## CHAPTER 4

### IMPACT ASSESSMENT OF BRAIN DRAIN ON SELECTED SECTORS OF THE NIGERIAN ECONOMY

#### 4.1 INTRODUCTION

Migration has been implicated as constituting a drain-pipe for the erosion of human resources vital for national development in developing countries. One of the sectors in the Nigerian economy that is seriously affected by emigration is healthcare delivery. While qualified personnel constitutes one of the major ingredients of instituting and maintaining an efficient healthcare delivery system, there are other factors such as funding, infrastructure and health education that are vital components of a functional healthcare delivery system.

Migration is associated with increased global wealth. This wealth is generated by the corps of highly-skilled and semi-skilled professionals. What has remained contentious is the distribution of this wealth within the global system. While the multi-skilled Nigerian diaspora creates wealth for, and makes enormous contributions towards development in their host economies, their home country seemingly holds the short end of the stick. However, there appears to be a trickle-down effect on Nigeria through the investment potentials of its diaspora. But the conditions that created the avenue for emigration must either be ameliorated or eliminated for the restoration of confidence in the home economy.

Despite the fact that the targets of migrant-receiving countries are the highly-skilled and semi-skilled professionals, their skills are, nevertheless, honed to higher standards in the process of their sojourn abroad. Ordinarily, part of the trickle-down effects of emigration ought to be the transposition of these skills in the home economies to aid industrialisation. But the continued underdevelopment of Nigeria and the absence of the Nigerian diaspora in the country's development agenda have demonstrated the untenability of this assumption.

This chapter examines the selected sectors of the Nigerian economy from which we derived our hypotheses. It evaluates how inadequate personnel through the brain drain have undermined efficiency in Nigeria's healthcare delivery system and the trend of diaspora-led investment initiatives as well as the remittance portfolio within the ambit of extant domestic investment incentives. It also interrogates the interface between the diaspora and the transference of technological knowledge within the gridlock of global intellectual property rights regime.

## 4.2 BRAIN DRAIN AND HEALTH- CARE CHALLENGES IN NIGERIA

The Nigerian health sector is one of the major sectors adversely affected by the mass emigration of health professionals. The Nigerian health sector is virtually bereft of the optimal number of relevant crop of qualified health personnel to drive healthcare delivery to the teeming population. This is so because many qualified health personnel have emigrated abroad. As it is, Nigeria is one of the major health-staff-exporting countries in Africa. According to Uneke et al (2008), between April 2000 and March 2001 about 347 Nigerian nurses emigrated legally to Britain. The corresponding period that is, between April 2001 and 2002, 432 nurses emigrated to Britain. While Nigeria is denied of the vital services of its health professionals, the West and the oil-rich states of the Middle East are the prime beneficiaries (Mbanefoh 2007:2). As the health sector is an integral part of the 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 human capital loss in Nigeria's health sector is locatable in the increasing inability of the country to subdue its numerous health challenges which contribute to low life expectancy. The medical brain drain is not peculiar to Nigeria. Indeed it is the rule rather than the exception in the whole of Africa. The depth of the problem is such that Dr Lalla Ben Barka apocalyptically predicted that "in 25 years, Africa will be empty of brains" (cited in Mbanefoh 2007:5).

**Table 4.1: Basic Demographic, Health and Socio-Economic Indicators of Nigeria**

<b>Indicators</b>	<b>Estimated / Site</b>
Area	923,968sqkm
Population	140 million (2007)
No. of LGAs	774
No. of States	36
Crude Birth Rate	40.6 per 1000
Rate of Natural Increase	45 per 1000
Population Doubling Time	23 years

Population Growth Rate %	3.2% (2007)
Life Expectancy at Birth	52years (1992); 54.0 (2007)
Literacy Rate	64.2 (2007)
Per Capita GDP (USD)	1,256.6 (2007)
Food Energy Intake	Adult Equivalent 2100 Cals. 2900 Cals.
Poverty Incidence	65.6 (1996); 54.4 (2004)
Population in Poverty	67.11 Million (1996); 68.70 (2004)
Under Five Mortality Rate	137 per 100,000 Live Births

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*Source: NBS 2009: 201; CBN 2007:xliv*

Nigeria is home to over 140 million people with population growth rate of between 2.8 and 3.2 percent as at 2007. More than half of Nigerians are categorised as poor with official incidence of poverty put at 54.0 percent (CBN Annual Report 2007: xliv). What the interpretation of these statistics immediately reveals is that the unfortunate economic status of over half of Nigeria's population imperils their access to adequate healthcare services. The imperilment is deepened by the skewed interplay of increasing population and decreasing healthcare providers as a result of sustained emigration. Going by the WHO recommendation of 20 physicians per 100,000 people or one physician to 5,000 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: 3) informs that as at 1979, Nigeria had a doctor-population ratio of 1:24,607. Nigeria would have surpassed the WHO threshold if not for brain drain. Going by the number of physicians in good standing, that is, those who renewed their annual practicing licence, the 2007 doctor/population ratio was 1:10,000. **Table 4.2** showcases the global critical shortages of doctors, nurses and midwives as at 2006. Africa was worst-hit, as it still required 139 percentage increase in its present stock to reach acceptable limits. The trend since then had deteriorated, with greater increase in the demand for African physicians and 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 critical shortage of health professionals.

**Table 4. 2: Estimated Critical Shortages of Doctors, Nurses and Midwives,  
(By WHO Region) (2006)**

WHO Region	Number of Countries		In Countries with Shortages		
	Total	With Shortages	Total Stock	Estimated Shortages	Percentage Increase Required
Africa	46	36	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	192	57	3,355,728	2,358,470	70

NA= Not applicable; Source: *World Health Report 2006*:13

By 2010, the ratio of doctor-population in Nigeria ought to have met the WHO standard or at least be close to it considering the enormous resources Nigeria had earned from oil but this is not the case. Nigeria is still very far from meeting the WHO doctor-population benchmark. The reason lies in the brain drain that mops up medical professionals and the rate of population growth, which ranged between 2.8 and 3.2 percent with very high migratory flows made it impossible for the wide gap in the ratio to be narrowed. As Mbanefoh (2007:3) opines:

Medical professionals, particularly the doctors, have remained a scare commodity in the health systems in Africa. Filling vacancies created by the emigration of experienced doctors tend to be difficult due to their increased demand by the 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 snapped up by the DCs. The major reason in the hole in the manpower formation in the health sector is the state-centred neglect of the sector. Since 1980s, the DCs have variously implemented variants of “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 2007:4).

The Nigerian health system consists of orthodox, alternative and traditional systems of healthcare delivery. For various reasons, these three systems are patronised by Nigerians in their pursuit of good health and longer life. The Nigerian government recognises and regulates the activities of these systems (AHO 2008:9). Within Nigeria's orthodox health system it operates a three-tier hierarchical healthcare system comprising primary, secondary and tertiary tiers. Lambo (1983:19); FMOH (2004:9-10) differentiate these tiers thus: the primary tier occupies the base of the hierarchy and represents the first point of contact between the patient and the healthcare delivery system. The institutional outlets for the dispensation of primary healthcare services are private and public health clinics, centres and dispensaries and maternities. The secondary tier covers referral healthcare institutions and includes general, cottage and mission hospitals. The tertiary tier includes teaching and specialist hospitals. Lambo (1983:191) identifies the major challenge of healthcare service delivery as the shortage of skilled health personnel especially doctors.

In 2006, the problem seemed to have deepened with the shortage of health workers a key problem plaguing Nigeria's healthcare sector. In WHO's 2006 classification of countries with critical human resource shortage, Nigeria was included amongst the 57 countries so designated (WHO Report 2006:12). Sub-Saharan Africa was hit most by this shortage as 36 of the countries in the region made the list. WHO estimated that for all these countries designated as suffering from human resources shortage in their healthcare delivery system to reach the target levels of health worker availability, an additional 2.4 million professionals would be required globally (WHO Report 2006:12).

The explanation of the shortage in the levels of health worker availability in Nigeria is not so much a matter of institutional incapacity, as there has been consistency in the admission of prospective students into health teaching institutions, but principally a product of brain drain. Using the University College Hospital Ibadan (UCHI) as a case study to buttress the debilitating and rippling effect of brain drain on Nigeria's health sector, Mbanefoh (2007:4), records that between early 1980s and 1987, the UCHI lost almost 40 percent of its senior doctors, with the Department of Surgery worst hit. For instance, out of 23 lecturers in 1984, 18 of them had left by 1989 leaving only five lecturers to man the department. Flowing from this development student intake plummeted from 274 in 1984 to 124 in 1989. The ripple effect of this seeming mass exodus of health professionals has

continued to bog down advances in healthcare delivery in Nigeria.

As at 2007, there were 24,879 healthcare facilities in Nigeria with combined bed spaces of 97,567. Also there were 55,376 registered physicians (comprising 52,408 Nigerians and 2,968 non-Nigerians) and 219, 089 registered nurses and midwives (NBS 2007:34). These numbers of physicians and nurses represent registrants in the professional organizations of these medical disciplines and not necessarily those manning these hospitals. AHWO (2008: 9) affirms that out of the total number of Nigerian doctors (52,408) on the medical register as at December 2007, only 14,000 doctors paid their annual practicing licensing fee for that year. Similarly, only a fraction of nurses and midwives paid their annual practicing fees. This means that only 14,000 doctors were eligible to practice according to statutory requirements. AHWO (2008: 9) has contended that this number represents the actual human resources available to Nigeria's health sector as "... the medical and indeed the nursing register has never been pruned of those doctors that died or have migrated out of the profession or into foreign countries". Currently Nigeria has 23 fully accredited and five partially accredited medical schools. Accreditation of medical schools in Nigeria is the exclusive preserve of the Medical and Dental Council of Nigeria (MDCN) which derives its powers vide Medical and Dental Practitioners Act Cap 221 (now Cap M8) Laws of the Federal Republic of Nigeria 1990 (<http://www.mdcnigeria.org>). There are also 86 approved schools of nursing, 77 approved schools of midwifery, 12 laboratory schools, 6 schools of physiotherapy, 5 schools of radiography, 9 schools of pharmacy, 19 schools of pharmacy technology, 40 schools of health records, 13 schools of community health officers, 43 schools of dental technology, 6 schools of dental therapy and 3 schools of optometry (AHWO 2008:10).

Despite these institutional frameworks to produce health professionals, the rate of production has been slow and the rate of poaching aggressive and high, especially Nigeria doctors and nurses. Between 2001 and 2005, the combined graduate turn-out by the country's medical schools was 8,840 doctors. Within the same period a total of 1,677 pharmacists were produced (NBS 2009:285).

Notwithstanding the lofty policies of Nigeria's Federal Ministry of Health about strategies to promote healthcare delivery system, several challenges face it. The core of this challenge is human resources needed to push these policies through. The unconducive working environment and low prospects of professional satisfaction in Nigeria and the tempting remuneration package abroad have combined to deepen Nigeria's healthcare delivery dilemma. The Secretary-General of the Nigerian Medical Association (NMA), Dr

Kenneth Okoro in an interview with a Nigerian tabloid averred that “the health sector remains deplorable without any significant progress. The indices for health remain poor”. He blamed this state of affairs on poor motivation of available human resources which fuels brain drain (Thomas 2008).

**Table 4.3** shows the current nominal and regional distribution of health workforce. It is important to note that these figures represent the total names as contained in the registers of these various professional bodies and not necessarily the practitioners on ground. The regional distribution reflects where they are domiciled; that is, the branch of the professional bodies that registered them.

**Table 4.3: Nominal and Regional Distribution of Health Workforce  
(2007)**

Health Worker Categories	Number	Regional Distribution (Percentage)					
		North-Central	North-East	North-West	South-East	South-South	South-West
Physicians	52,408	9.73	4.06	8.35	19.59	14.37	43.9
Nurses	128,918	16.4	11.65	13.52	15.29	27.75	15.35
Radiographers	840	14.3	3.66	5.97	15.0	18.3	43
Pharmacists	13,199	19.94	3.8	7.79	11.74	12.39	44
Physiotherapists	1,473	10.8	2.73	8.32	8.58	7.93	62
Medical Lab Scst.	12,703	6.82	1.72	3.6	35.26	23.89	29
Env. & Health W	4,280	9.39	11.27	18.94	12.36	15.69	32.08
Health Records Officers	1,187	13.34	4.85	11.6	14.64	29.9	26
Dental Technologists	505	14.08	5.92	5.92	12.96	16.62	44.5
Dental Therapists	1,012	13.19	10.29	21.88	10.19	12.99	31.5
Pharmacy Technician	5,483	6.17	9.12	18	8.58	11.8	46

Source: *AHWO* 2008:23

The bleak state of Nigeria's health sector is deepened by lack of qualified health professionals to drive the healthcare delivery system. Human resources are the key components and driving forces of healthcare system and not just the funding and infrastructures. Adequate funding and relevant infrastructures only assist the human resources to actualise set goals. That is why the progressive funding of Nigeria's health sector has not yielded the desired result. Again, no matter the amount of remittances sent by Nigerian doctors to the country, healthcare system will remain comatose and life expectancy projections will continue to go downhill because the remittance receipts can never take the position of healthcare providers.

There is no doubt that the Nigerian healthcare delivery system is facing a serious crisis. The explanation for the crisis is not domiciled in a single factor but in a combination of factors that interact in a complex way to coalesce into forces that push away healthcare managers. Dovlo (2003:1) captures these factors to include:

... the HIV/AIDS epidemic, the re-emergence of old communicable diseases such as TB [tuberculosis] and Malaria, and the apparent paradox of increasing levels of disorders linked to changing lifestyles and degenerative diseases. In addition are perennial problems affecting health systems that stem from the economic difficulties in our countries leading to very low funding of health services and deterioration of health services infrastructure.

The economic crisis that affected African economies including that of Nigeria in the 1980s prompted the active intervention of the IFIs in these economies. The intervention of these IFIs in Africa's domestic economies was the watershed in the crisis that eroded the health sector. The reform package of SAP had conditionalities that spawned the ground for the underfunding and subsequent collapse of the health infrastructure.

The emphasis and insistence of the IFIs on the removal of subsidies on social services including health and the acquiescence of the Nigerian government led to the drastic reduction in budgetary allocation to the health sector and the reversal and crisis that subsequently engulfed the sector. The budgetary allocation to the health sector plummeted from N350.4 million in 1986 to N235.4 in 1987 when the federal budget reflected the effects of SAP (CBN Statistical Bulletin 2004:217-224). The underfunding of the health sector, as other social services in accordance with the IMF conditionalities, had rippling effects on both institutional capacity and human resource retention in the health sectors. As Mbanaefoh (2007:3-4) avers, "the resultant under-funding meant that facilities for teaching, research and service delivery

were inadequately provided and maintained, researches were under-funded and personnel were poorly remunerated. The professionals became restive”.

It was this restiveness that acted as a push factor to the mass emigration of Nigeria’s medical professionals which destabilised the health sector leading to serious reversals in the modest gains recorded in the eradication of communicable and non-communicable diseases before then. As Orubuloye and Oni (1996:303) observe,

In the first five years of the structural adjustment program, 1986 -1990, government allocation of resources to the health sector ranged from just US 42 cents to US 62 cents per capita, an amount which was grossly inadequate to treat an attack of malaria, or a mere 1.6 to 1.9 percent of the total federal government expenditure during the 1980 – 90.

The drastic reduction in budgetary allocation to the health sector meant that the provision of infrastructural facilities as well as distribution of routine drugs in hospitals which had hitherto been free were no longer feasible. According to UNICEF sources (cited in Orubuloye and Oni 1996: 303-304) infant mortality rate (IMR) in Nigeria rose from its 1988 level of 104 per thousand to 114 per thousand in 1992 and childhood mortality degenerated from 174 per thousand to 191 per thousand during the same period. The reversal was despite the national health policy introduced in 1988. The National Health Policy (NHP) had lofty ideals which were embodied in its quest to improve the health of Nigerians in a sustainable manner based on primary healthcare (PHC) (Nnamuchi 2007:3). The goal of PHC to improve the health of all Nigerians through sustainable health system that is promotive protective, preventive, restorative and rehabilitative of socially and economically productive and fulfilling life to every individual not only fell short of expectations but remained elusive as Nigeria was demonstrably unable to meet WHO benchmarks in almost all departments of health well-being (Nnamuchi 2007: 3). The dearth of qualified doctors to spearhead both the implementation of new policies of the federal government and the consolidation of existing national health policies owing to mass emigration of qualified doctors undermined progress in the health sector. The effect was that “the overall availability, accessibility, quality and utilization of health services decreased significantly or stagnated in the past decade” (Uneke et al 2008).

The overall sectoral implication was that the health sector budget got its financing from charges on patients to augment what the government had provided. In essence, the government no longer provided the capital outlay it had previously provided. But the socio-

economic realities in terms of the level of poverty prevailing in the country and the long tradition of free Medicare (introduced during the oil boom era) created certain rigidities that were unsupportive of such projections. The devaluation of the Nigerian currency unit, which was at par with the US Dollar prior to SAP, by as much as 500 percent instead of 60 percent originally planned meant that the prices of every thing in the country skyrocketed. The import-dependent nature of the Nigerian economy led to a contentious scale of preference between personal and family daily survival costs and costs of Medicare (Gana 1990: 97). The effects of this development were such that:

Most government hospitals were almost deserted, as the number of people attending them dwindled rapidly, partly because most government hospitals have been reduced to mere consulting clinics for lack of equipment and drugs. Many patients were attempting home cures or had turned to the traditional medical system or to the faith healing churches. (Orubuloye and Oni 1996: 303).

The underfunding of the health sector directly facilitated the conditions that induced job dissatisfaction, unavailability of requisite medical equipment vital for diagnoses and treatment and unconducive operational environment as well as the mass emigration of high-quality medical personnel critical for Nigeria's health sector development.

Even though the crisis in the government healthcare system led to the proliferation of private medical practice and the establishment of private hospitals and clinics (Orubuloye and Oni 1996: 304, Nnamuchi 2007:4), it did not lead to improvement in the healthcare indices of the country. The reason for the relatively low impact of the proliferation of private hospitals and clinics on the healthcare indices of Nigeria inhered from three interrelated scenarios: one, the physicians that operated the government healthcare facilities were the same ones that set up and operated those private clinics and in most cases, one physician serviced several clinics; two, these clinics were more of economic stop-gap measures to augment the salaries of physicians, which like the Naira, had been eroded by the logic of devaluation; and three, the setting up of hospitals and clinics was motivated by capitalist consideration of profit. Therefore, only patients with the wherewithal were able to access their services. Most of the private hospitals and clinics are unofficial extensions of government health institutions in more ways than one. Most of these doctors are employees of government health institutions and unethically use their positions to canvass for, or recommend, their private hospitals as referrals for diagnosed sicknesses that equipment for their management are either sabotaged

or unavailable in government hospitals. On most occasions, institutional sabotage to protect their private healthcare business interests partly explained the lack of changes in public health institutions in spite of billion of Naira in budgetary allocation to the health sector. But again, it is not the provision of diagnostic and other equipment in the health sector that spawned and sustained the crisis in the sector (although they are intervening variables) but the dearth of medical personnel as a result of their mass emigration to the developed economies.

**Table 4.4a: Characteristics and Trends Analysis of Health Expenditure in Nigeria, 1998 – 2002 (₦ Million)**

Description	1998	1999	2000	2001	2002
<b>Total Health Expenditure (THE)</b>	<b>157,081.13</b>	<b>179,891.20</b>	<b>215,209.13</b>	<b>256,283.42</b>	<b>278,732.15</b>
<b>General Govt. Expenditure (GGE)</b>	<b>23,502.13</b>	<b>29,882.85</b>	<b>40,391.25</b>	<b>69,765.96</b>	<b>60,211.87</b>
Federal	15,199.00	16,866.03	22,781.25	45,078.14	34,538.73
State	6,162.13	6,486.68	13,552.27	20,417.09	20,660.43
Local	2,141.00	6,530.14	4,057.73	4,270.73	5,012.71
<b>Private Expenditure</b>	<b>113,028</b>	<b>125,096.40</b>	<b>139,918.84</b>	<b>172,248.41</b>	<b>201,416.28</b>
Firms	4,308	6,313.96	10,046.77	14,646.75	17,817.91
Household	108,720	118,782.40	129,872.07	157,601.66	183,598.37
<b>Donors</b>	<b>20,551</b>	<b>24,911.96</b>	<b>34,899.04</b>	<b>14,296.05</b>	<b>17,104.00</b>
<b>Growth Rate of Nominal THE</b>	-	<b>14.52</b>	<b>19.63</b>	<b>19.09</b>	<b>8.76</b>
<b>Exchange Rate (₦/US\$1.00)</b>	<b>21.8861</b>	<b>92.6934</b>	<b>102.1052</b>	<b>111.9433</b>	<b>120.9702</b>
<b><u>HE: Ratios</u></b>					
GDP (Million ₦)	2,882,310	3,322,030	4,902,800	5,702,650	5,927,680
Population (thousands)	108,635	111,681	114,746	117,823	120,911
THE/GDP	5.45	5.42	4.39	4.49	4.70
Govt/THE	14.96	16.61	18.77	27.22	21.60
HHD/THE	69.21	66.03	60.35	61.50	65.87
Per Capita THE	1,445.953	1,445.95	1,655.92	1,981.03	2,359.12

Source: NHA 2005: 26

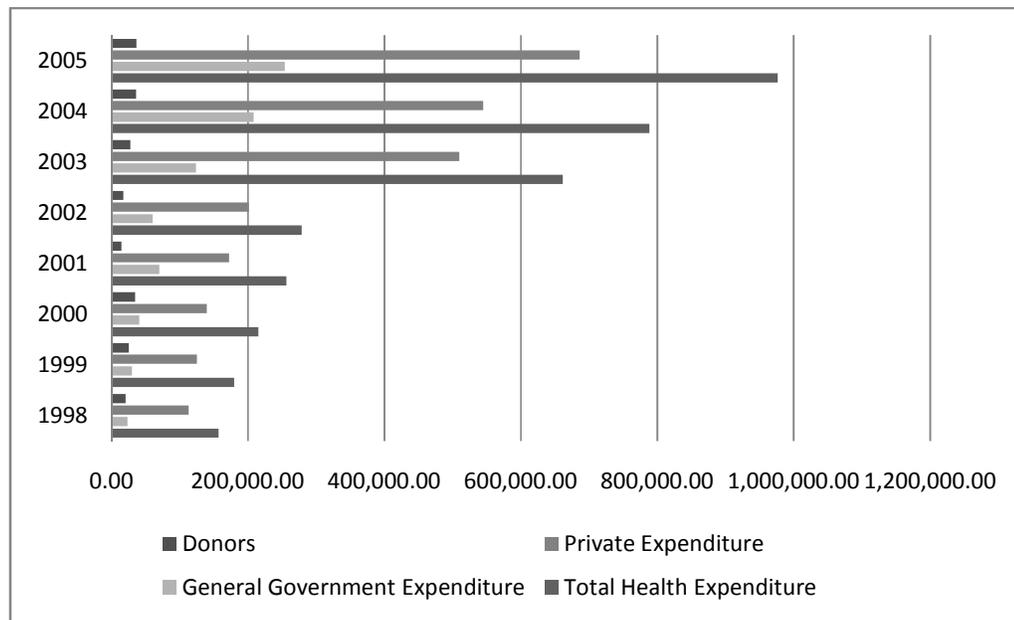
**Table 4.4b: Characteristics and Trend Analysis of Health Expenditure in Nigeria: 2003 - 2005 (₦ Million)**

<b>Description</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>
<b>Total Health Expenditure (THE)</b>	<b>661,662.16</b>	<b>788,723.91</b>	<b>976,687.60</b>
<b>General Govt. Expenditure (GGE)</b>	<b>123,681.76</b>	<b>208,207.86</b>	<b>254,174.42</b>
Federal	47,026.82	115,068.86	130,760.24
State	48,022.77	56,963.53	78,778.28
Local	28,632.19	36,175.47	44,635.90
<b>Private Expenditure</b>	<b>537,980.38</b>	<b>580,516.05</b>	<b>722,513.18</b>
Household	489,785.11	518,409.62	656,545.51
Firms	20,323.11	26,068.46	29,670.97
Development Partners	27,872.16	36,037.98	36,296.70
GDP (Billions)	5,403.01	9,913.52	11,411.07
Population (Thousands)	128,569	132,273	136,683
<b>Growth Rate of Nominal THE</b>	37.38	19.20	23.83
<b>Exchange Rate (₦/US\$1.00)</b>	<b>129.3565</b>	<b>133.5004</b>	132.1
<b><u>HE: Ratios</u></b>			
THE/GDP	12.25	7.96	8.56
Govt./THE	18.69	26.40	26.02
HHHE/THE	74.02	65.73	67.22
Per Capita THE	5,146.36	5,962.85	7,177.15
Per Capita HHHE (from NLSS)	3,835.58	3,946.07	4,857.61

Source: NHA 2009: 16; CBN Statistical Bulletin (2004:402); CBN Annual report 2006:xl)

**Figure 2: Characteristics of Health Expenditure in Nigeria, 1998-2005**

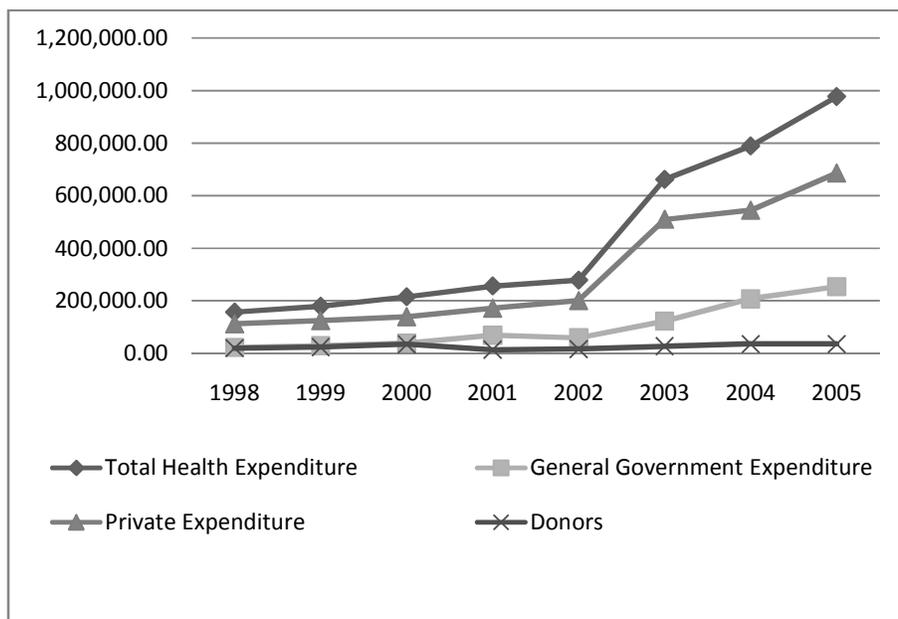
(₦ million)



Source: *NHA 2005: 26*

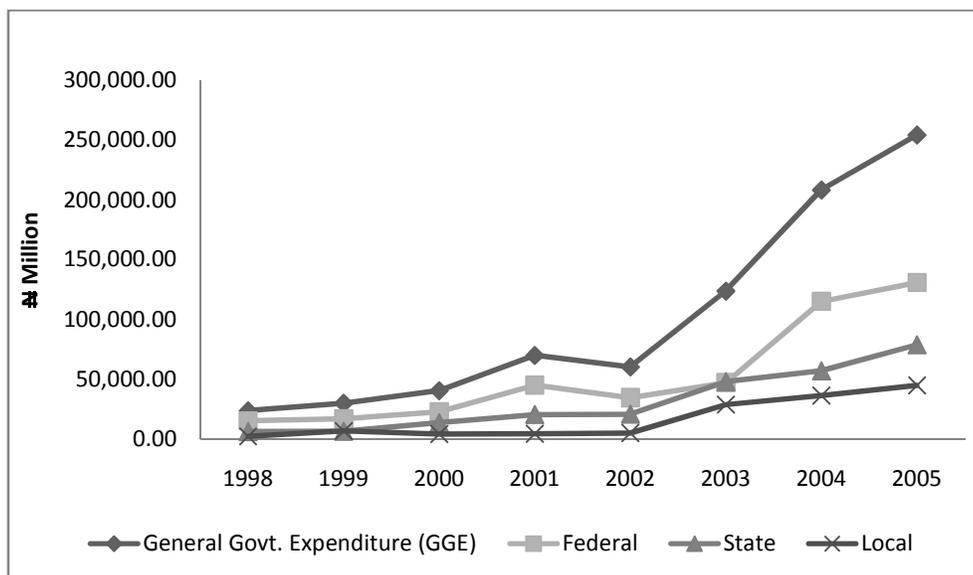
What the data on Nigeria's Total Health Expenditure (THE) (see **Table 4.4a and b** and **Figure 2** above) from 1998-2005 show is consistent upward trend. However, the depreciation of the Nigerian currency obviates the supposed gains of the nominal upward trend in health budgets. From ₦157.1 billion in 1998 THE rose by 14.52% in 1999 to translate to ₦179.9 billion. Between 1999 and 2000, THE again grew by 19.63 percent to come up to ₦215.2 billion in 2000 and also appreciated between 2000 and 2001 by 19.09 percent to settle at ₦256.3 billion in 2001. However, the growth rate of THE slowed down between 2001 and 2002 as it grew by 8.76 percent to settle at ₦278.7 billion in 2002. There was exponential rise in the growth rate of THE as it grew by 137.38 percent. Thus, in 2003, THE came up to ₦661.67 billion. Between 2003 and 2004, THE grew by 19.20 percent representing ₦788.72 billion in 2004. The growth in THE continued in 2005 with the rate being 23.83 percent or ₦976.69 billion. There are two problems with the trend of health expenditure: one, the government share of THE is abysmally low. What this means is that government is a fringe player in the health sector; two, the consistent depreciation of the Nigerian currency against the dollar means that, in actuality, the budgetary allocation to the health sector is still too low to sustain health professionals.

**Figure 3: Compositional Analysis of Health Expenditure in Nigeria, 1998-2005 (N Million)**



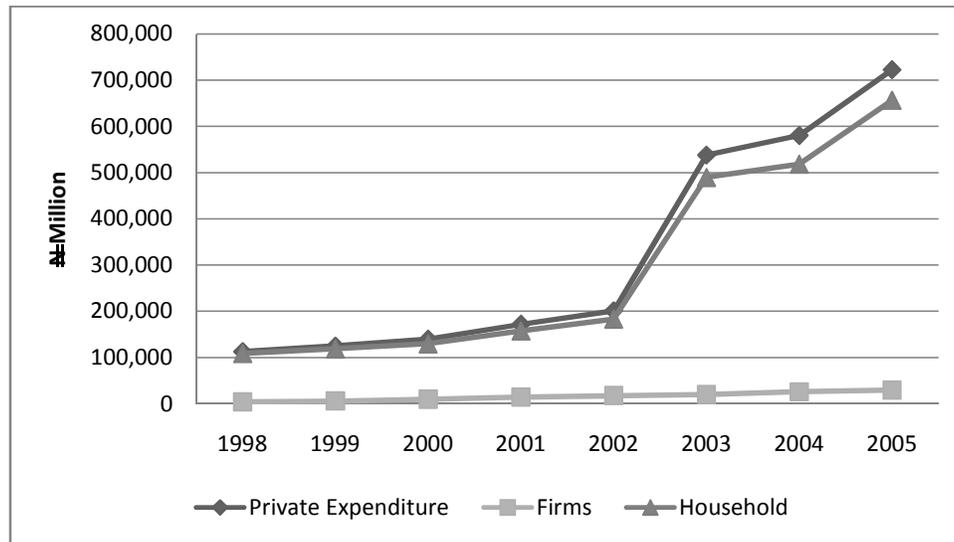
Source: *NHA 2005: 26*

**Figure 4a Contributions of Government Tiers to THE**



Source: *NHA 2005: 26*

**Figure 4b Contributions of the Private Sector to THE**



Source: *NHA 2005: 26*

**Figure 3** above showcases the compositional analysis of health expenditure in Nigeria. One basic fact in the analysis is the consistent growth in the health expenditure of all the tiers. The highest chunk of THE was through private expenditure.

**Figures 4a and 4b** capture the composition of the contributions of both the three tiers of government and the sub-sectors within the private expenditure category. As the graph depicts, while the federal government made the highest contribution to the GGE, the individual households (comprising the people) contributed the highest to the private expenditure portfolio.

To address the shortfalls arising from government expenditure on health, a new insurance policy was introduced under the auspices of National Health Insurance Scheme (NHIS) Act in 1999. The NHIS, therefore, was a strategy to introduce a new source of healthcare financing that would reduce the cost burden on individuals as well as improve the quality, availability and affordability of health services in Nigeria. It thus encompasses both government and private sector employees as well as the informal sector. Even though the NHIS has not finally covered all sectors and the entire country, it promises to be a veritable source of health financing and it is estimated that 5.3 million Nigerians are already benefiting from it (Muanya 2010).

Since 2003, the contribution of NHIS to THE has been growing. Health Insurance Expenditure (HIE) grew from about ₦15.66 billion in 2003 to ₦18.79 billion in 2004

representing 20 percent increment. Between 2004 and 2005, HIE grew by 14 percent above the 2004 figure which translated to ₦ 21.34 billion (FMOH 2009: xix). The contributions of NHIS and plans to expand its reach have positive prospects. But its evaluation so far shows that despite its contributions which eased off considerable burden off the shoulders of the poor, the health indicators have not displayed its impact.

Healthcare delivery depends on a highly trained, balanced and motivated workforce to drive the translation of policies to concreteness in order to advance national health indices. While efforts have been made in Nigeria to train medical personnel to man national, state, mission and private hospitals, clinics and dispensaries, their final destinations for professional practice are the various health facilities in the developed countries.

**Table 4.5: Health Training Schools, 2008**

Institution	Total	Distribution of Health Training Schools in Nigeria						Total
		S/E <sup>1</sup>	S/S <sup>2</sup>	S/W <sup>3</sup>	N/C <sup>4</sup>	N/E <sup>5</sup>	N/W <sup>6</sup>	
Partial & Fully Accredited Medical Schools	28	7	8	6	3	1	3	28
Accredited Sch. Of Dentistry	8	1	2	4	0	1	0	8
Approved School of Nursing	76	19	18	20	10	7	2	76
Approved School of Midwifery	77	17	17	17	10	6	10	77
Medical Lab. School	12	4	5	1	0	1	1	12
Rehab. Therapy	6	1	0	4	0	0	1	6
School of Radiology	5	2	1	1	0	1	0	5
School of Pharmacy	9	1	2	4	1	0	1	9
School of Pharm. Technology	19	2	3	4	4	0	6	19
School of Health Records	40	3	10	10	7	2	8	40
CHOs Schools	13	1	3	3	2	1	3	13
CHEWs Schools	43	6	5	7	9	6	10	43
Dental Technician	4	2	0	2	0	0	0	4
Dental Therapy	6	1	1	2	0	1	1	6

Optometry	3	2	1	0	0	0	0	3
<b>Total</b>	<b>349</b>	<b>69</b>	<b>76</b>	<b>85</b>	<b>46</b>	<b>27</b>	<b>46</b>	<b>349</b>

<sup>1</sup>South-east; <sup>2</sup>South-south; <sup>3</sup>South-west; <sup>4</sup>North-central; <sup>5</sup>North-east; <sup>6</sup>North-west  
Sources: Medical and Dental Council of Nigeria (<http://www.indenigeria.org/medschools.htm>); AHWO 2008: 25; Pharmacists Council of Nigeria (PCN) (<http://www.pcnn.org/universities%20accredited%20for%20pharmacy%20education%20in%20Nigeria.htm>). Nursing & Midwifery Council of Nigeria (NMCN) (<http://www.nmcnigeria.org/socs.php>).

**Table 4.5** above shows that Nigeria has adequate health training institutions which are well distributed within the regions of the country to cater for high, medium and low-skilled health care providers necessary to achieve efficient healthcare delivery system. There are a total of 349 health training institutions in Nigeria distributed across the six geopolitical zones of the country. There are twenty-eight medical schools out of which 23 are fully accredited and five are partially accredited by the MDCN. Partial accreditation means that there are certain inadequacies and deficiencies in the affected medical schools that might compromise the quality of the school's medical graduates. Once these inadequacies and deficiencies are satisfactorily addressed in accordance with minimum standards set by the MDCN, the status of such medical schools is reevaluated and full accreditation awarded. There are nine schools of pharmacy and 153 schools of nursing and midwifery. These training institutions have been producing vital human resources.

**Table 4.6: Training Output (Graduation into the Professions)**

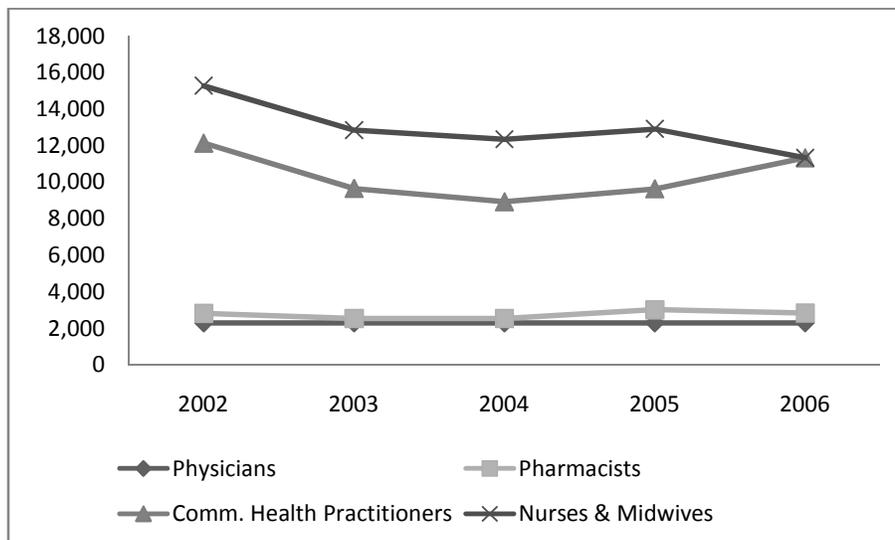
Categories	2002	2003	2004	2005	2006
Physicians	2,300	2,300	2,300	2,300	2,300
Nurses & Midwives	3,138	3,199	3,419	3,272	Na
Pharmacists	517	242	248	717	534
Radiographers	8	23	15	18	Na
Health Record	27	Na	123	94	339

Officers					
Comm. Health Practitioners	9,322	7,112	6,382	6,624	8,505
Dental Therapists	39	40	34	36	39
Optometrists	106	129	33	61	124

Source: *NBS 2009: 200*

**Table 4.6** shows the training output of major health professionals. Consistent output of health professionals between 2002 and 2006 indicates that personnel need in the health sector ought to have been at the threshold of the benchmark set by international health bodies with regard to the ratio of health professionals (especially physicians) to patients. **Figure 5** below shows the trend in the output of selected health professionals. Between 2002 and 2006, the country produced a fixed number of physicians. The training output of nurses and midwives as well as pharmacists shows fluctuation. For nurses and midwives, their output rose from 3,138 in 2002 before it nosedived to 3,272 in 2005. The same trend is observable for pharmacists; their training output declined from 517 in 2002 to 242 in 2003 and rose to 717 in 2005. It however declined to 534 in 2006. Also, community health practitioners recorded consistent appreciation.

**Figure 5 Trends of Training Output of Selected Health Professionals**



Source: *NBS 2009: 200*

The data in the **Table 4.7** below show that Nigeria has an appreciable stock of human resources for its health sector. Nigeria's quoted stock is impressive and comparable only to Egypt and South Africa as its 2005 stock translated to 39 doctors and 124 nurses per 100.000 populations (AHWO 2008: 21). This was far better than sub-Saharan Africa's average of 15 doctors and 72 nurses per 100.000 population. But the posted figure of 52,408 doctors represented the number of physicians in the Books of MDCN.

**Table 4.7: Nominal and Actual Distribution of Health Workforce 2007**

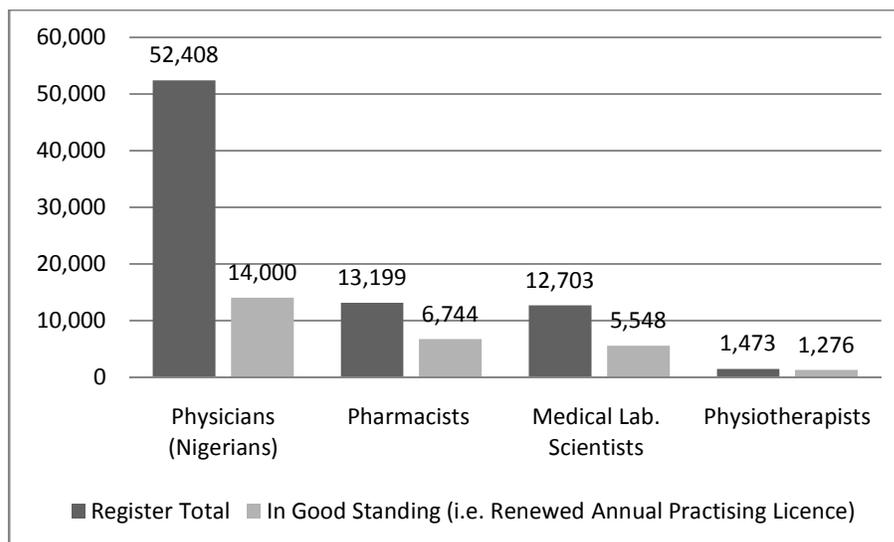
<b>Health Occupational Categories</b>	<b>Register Total</b>	<b>In Good Standing (i.e. Renewed Annual Practising Licence)</b>
Physicians (Nigerians)	52,408	14,000
Physicians (Foreigners)	2,968	2,968
Nurses	128,918	Na
Midwives	90,489	Na
Dentists (Nigerians)	2,356	Na
Dentists (Foreigners)	215	215
Dental Technologists	505	350
Dental Therapists	1,012	936
Pharmacists	13,199	6744
Pharmacists Technicians	5,483	Na
Medical Lab. Scientists	12,703	5,548
Medical Lab Technicians	2,936	Na
Medical Lab Assistants	7,044	Na
Physiotherapists	1,473	1,276
Occupational Therapist	29	18
Radiographers	840	600
Optometrists	1,415	205
Chartered Chemists	1,503	1,503
Environment & Pub. Health Workers	4,280	1,500

Public Analysts	500	313
Health Mgt Workers/Health Officers	1,187	-
Other Health Support Staff/ Comm. Health Workers	19,268	-

Na= Not available. Source: *NBS 2009:179; AHWO 2008: 37*

AHWO (2008: 9, 21) has contended that the MDCN does not have any systemic mechanism in place to prune out of its register those physicians who have either emigrated, gone to other sectors or not practicing at all. Therefore, the closest one can get to establishing the number of active physicians in the system is to rely on the list of those who are up-to-date in the payment of their annual practising fees. Going by this list, the current stock of physicians in Nigeria is 14,000 (AHWO 2008: 9). **Figure 6** shows the nominal and actual stock of selected health professionals. While the nominal stock of physicians was 52,408, the actual number of practising physicians based on the renewal of annual practising licence was 14,000, that is 26.71 percent. Ditto for pharmacists whose figure of 13,199 and 6744 respectively translated to 51.09 percent. The professional registers of the medical laboratory scientists and physiotherapists also showed the differences in the nominal and actual stock as 43.67 and 86.63 respectively.

**Figure 6: Nominal and Actual Composition of Selected Health Professionals, 2007**



Source: *NBS 2009:179; AHWO 2008: 37*

There are intervening variables which might have accounted for, or constituted a clog in the wheel of progress in engendering healthcare delivery in Nigeria. These intervening variables include underfunding, poverty, lack of relevant health infrastructure like hospital diagnostic, laboratory and research equipment, lack of access to healthcare services and corruption. So, the degeneration of the infant mortality situation in Nigeria from 104 per thousand in 1988 (just two years after the commencement of SAP conditionalities) to 114 per thousand in 1992 as well as that of child mortality from 174 per thousand to 191 per thousand during the same period or the current healthcare situation could have been caused by any or combination of these rival variables.

Undoubtedly, the underfunding of the health sector had debilitating effects on it. But the resilience of the system towards survival led to the emergence of the private sector as a replacement to government as the bulwark of healthcare delivery services. Despite the comparatively exorbitant charges by the private sector in healthcare services, they were well spread within the country to cater for the people. The federal government also came up with a National Health Policy in 1988, and revised in 2004, to cater for the people and thus cushion the effect of SAP on the populace through the instrumentality of primary healthcare (Nnamuchi 2007: 3). Nigeria's health policy was in response to the global agreement earlier reached in Alma Ata Conference in the USSR between 6<sup>th</sup> and 12<sup>th</sup> September 1978. While recognising and affirming the fundamentality of access to basic health services and the unacceptability of the gross inequality in the health status of the people within the global capitalist system, Article V of the Declaration argues that:

Governments have a responsibility for the health of their people which can be fulfilled only by the provision of adequate health and social measures. A main social target of governments, international organisations and the whole world community in the coming decades should be the attainment by all peoples of the world by the Year 2000 of a level of health that will permit them to lead a socially and economically productive life. Primary healthcare is the key to attaining this target as part of development in the spirit of social justice. (Declaration of Alma Ata 1978).

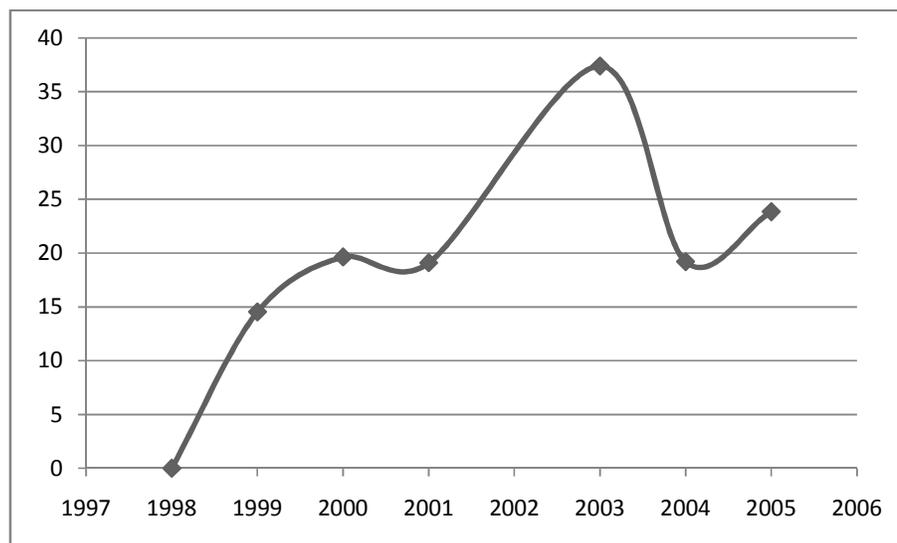
It took Nigeria ten years to put together a healthcare policy that essentially incorporated primary healthcare (PHC) strategies for healthcare delivery in the country. The PHC approach was envisaged to be intersectoral involving everybody. As Hall and Taylor (2003: 18) have outlined:

PHC envisaged universal coverage of basic services such as education on methods of preventing and controlling prevailing health problems; promotion of food security and proper nutrition; adequate safe water supply and basic sanitation; maternal and child health, including family planning; vaccination; prevention and control of locally endemic diseases; appropriate treatment of common diseases and injuries, and provision of essential drugs. The emphasis changed from the larger hospital to that of community-based delivery of services with a balance of cost-effective, preventive and curative programs.

The implementation of PHC in Nigeria with its reach to all the 774 local governments in Nigeria did not bring down the infant and maternal mortality rate and other preventable diseases (FMOH 2004: 2). The failure of PHC manifested in either a total lack of services at the community level, or services of poor quality. The reaction of people consisted of losing confidence in the entire PHC framework which necessitated the bypassing of the primary-level providers and the distortion of the in-built referral system (Hall and Taylor 2003: 19). It is lack of qualified personnel to man these PHCs that created the crisis of confidence on their capacity to provide basic health services. And the effect was that these PHCs were bypassed leading to the overstretching of the secondary and tertiary level health facilities whose capacity was also marred by human resource insufficiency. The result was that Nigeria ranked 187<sup>th</sup> of the 191 member-nations assessed on the basis of health systems performance (WHR 2000:154).

There is evidence that health financing has been on the rise but there is no evidence on commensurately corresponding effect on health indicators. This is because of the weakness of the Nigerian currency vis-à-vis the United States dollar in the foreign exchange market. This explains the abounding evidence about reversals in health indicators across several health departments. In 1991, the life expectancy at birth was 53.8 and 52.6 years for females and males respectively but dropped to 48 years for females and 47 years for males in 2005 and was 47.7 years in 2007 (Nnamuchi 2007:8; HDR 2009). Total Health Expenditure (THE) increased nominally from ₦157.1 billion in 1998 to ₦278.7 billion in 2002 and grew astronomically to ₦661.662 billion in 2000 and to ₦976.69 billion in 2005. **Figure 7** shows the growth rate of nominal THE. The nominal growth rate of THE is characterised by fluctuations. It grew from 14.52 percent in 1999 to 19.63 percent in 2000 and fell to 8.76 percent in 2002. It rose sharply to 37.38 percent in 2003 and fell to 19.20 percent in 2004 and rose again to 23.83 percent in 2005.

**Figure 7: Growth Rate of Nominal THE**



Source: *NHA 2005: 26*

Even though poverty has a negative effect on access to quality healthcare delivery services, health indicators in Nigeria tend to demonstrate that it is far from being the cause of the healthcare crisis in Nigeria. Donor agencies have targeted and offered free medical assistance for many diseases. In 2006, the Dutch Ministry of Development Cooperation launched a US\$131 million Insurance Health Fund targeted at cushioning health bills of thousands of low-income Nigerians by granting them access to inexpensive basic healthcare services (IRIN 2006). The reduction of the incidence of poverty from 70 percent to 54.4 percent in 2004 and beyond has not translated into positive health indicators. While communicable diseases accounted for 72 percent of death, non-communicable diseases accounted for 21 percent of deaths in Nigeria. (FMOH 2005: 2).

**Table 4.8** shows that healthcare facilities have been on the increase with the three tiers of government competing amongst themselves and with the private sector. Between 2003 and 2007 the number of hospitals in Nigeria increased from 23,618 to 24,879. In the corresponding period, health centres and dispensaries similarly increased from 20,610 to 22,345. Similarly, the number of hospital beds increased from 73,230 in 2003 to 97,567 in 2007 which means that within the period under review there was increment in the capacity of health institutions to admit and closely monitor patients. Interestingly, more deaths were recorded. Total deaths in health institutions increased from 41, 283 in 2003 to 52, 986 in 2005 before it fell to 43,763 in 2007. The seeming increment in the number of physicians does not portray a true picture of physicians manning the health institutions. It only shows

increment in the production of physicians as recorded by the MDCN. The data demonstrate link between increase in nominal health expenditure and increment in health facilities.

The seeming incommensurateness in the effects generated by increased government funding of the health sector and the state of healthcare delivery inheres from the manpower crisis that besets the sector in Nigeria. As Yayehyirad and Hailemariam (2010:2) observe, “...many low-and middle-income countries face acute shortages and maldistribution of skilled health workers, impeding the likelihood of meeting health systems objectives and attaining national and international health and development goals”.

**Table 4.8: Public Health Institutions and Personnel  
2003 – 2007**

<b>Description</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
Number of Hospitals	23,618	23,641	24,522	24,753	24,879
Number of Health Centre and Dispensaries	20,610	20,653	21,222	21,325	22,345
Number of Hospital Beds	73,230	73,680	85,523	86,235	97,567
No. of Physicians (Nigerians & Aliens)	40,159	41,935	42,563	55,376	55,376
No. of Nurses and Midwives	136,751	158,920	169,923	219,089	219,089
Patients Treated in Medical Institutions	698,712	728,522	734,263	859,564	916,451
Total Deaths in Medical Institutions	41,283	43,674	52,986	49,986	43,763

Source: *National Bureau of Statistics (NBS) (2007:34).*

But despite all these seeming landmark progress, the Nigerian healthcare delivery system is still very far off the track in meeting world parameters of well-being for its citizens. According to (FMOH 2009: xix), "... the Nigerian health system operates in a reactive, fire-fighting way rather than a proactive way. It is not surprising, therefore, that Nigeria's health outcomes relating to preventable diseases like malaria and vaccine-preventable diseases are very poor..." The major plague that has atrophied the capacity of Nigerian health system and prevented it from meeting world health standards is the brain drain syndrome. Apart from eroding the health system of the vital healthcare manpower to drive the system, the lack which it engendered created room for the invasion of quacks and unqualified persons. As has been reported by Yahya (2006: 24) with regard to the immunisation programmes in Northern Nigeria:

...Community members expressed considerable concern about the age and competence of vaccinators. Numerous people across Bauchi, Kaduna and Kano States expressed alarm in that girls ranging between the ages 9 and 14 were selected to administer OPV [Oral Polio Vaccine] to babies. This was discouraging to many otherwise willing parents, who rejected the polio vaccines on the grounds that vaccination is a task for qualified health professionals... . To a number of parents, the employment of such girls for the task of immunization was disrespectful on the part of the health authorities and a relegation of a very important service.

It is the brain drain in the health sector that brought about this state of affairs. For, if the stock of Nigeria's qualified health personnel were to hold fort in the health sector, the kind of scenario painted in the preceding quotation would not have arisen. Dovlo (2004:2-3) acknowledges that there was substantial progress in the healthcare system of sub-Saharan Africa in the period following independence but this progress was stymied about two decades ago as a result of the poaching of its health professionals. In fact there was a resurgence of "old" communicable and non-communicable diseases as well as "new" epidemics in HIV/AIDS and such diseases of the "epidemiological transition" as cardiovascular ailments.

While the emigration of health professionals created and sustained crisis in Nigeria's health sector, it had a positive effect on developed countries' health system. Emeagwali (2009) has contended that considering the depth of the erosion of Africa's medical personnel by the developed countries especially the US, it is safe to conclude that "African medical schools are *de facto* serving American people, not Africa". It is not only the US that benefits from or poaches Africa's health professionals but the entire DCs. Nnamuchi (2007: 23) puts it in perspective thus:

... the number of physicians employed in the United States far exceeds that of any other country in Africa estimated at more

than 21,000... . In 2003 there were only 34,923 and 127,580 physicians and nurses in Nigeria compared to 133,641 physicians and 704,332 nurses in the United Kingdom (UK) in 1997. The population of Nigeria in 2003 was 122,790,463 whereas 58,808,266. people lived in the United Kingdom in 1997 meaning that UK, with less than half the population of Nigeria at the relevant period, had nearly four times the number of physicians and five and half times the number of nurses in Nigeria.

**Table 4.9a: Registered Doctors in the UK by Registration status and Country of Qualification (Nigeria) 27 May 2003**

Country of Qualification	Full Registration Only <sup>a</sup>	Full and Specialist Registration <sup>b</sup>	Limited Registration <sup>c</sup>	Provisional Registration <sup>d</sup>
Nigeria	1248	324	350	-

Source: *Dovlo* 2004:7

- a. Persons allowed unrestricted rights to practice in the UK.
- b. Persons with specialist qualifications who are fully registered to practice their specialty.
- c. Persons registered for specialist training purpose research, etc for a limited period or activity
- d. A temporary measure to allow for certain restricted professional activities.

**Table 4.9b: Nigerian Doctors Registered with the American Medical Association 2003**

Specialty	Number	Percentage
Internal medicine and Sub-specialties	1,269	44
Surgery & Surgical Sub-specialties	332	12
Family/Gen. Practice	281	10
Paediatrics	427	15
Psychiatry	187	7
Obstetrics & Gynaecology	161	6
Pathology / Oncology	90	3

Radiology	35	1
Preventive Medicine	32	1
Others	41	1
<b>Total</b>	<b>2,855</b>	<b>100</b>

Source: *AHWO* 2008: 31-32

**Tables 4.9a and b** show 2003 data of the population of Nigerian doctors trained and qualified in Nigeria that were registered in the UK and the US respectively. The registration status showed 1,248 full registration, 324 specialist registration and 350 limited registration in the UK. Table 4.15b shows that 2,855 Nigerian doctors were registered with the American Medical Association. Only 281 or 10 percent of them were in family /general practice, the rest were specialists in various fields of medicine. 1,269 or 44 percent were specialists in internal medicine and other sub-specialties; 427 or 15 percent were specialists in paediatrics; 332 or 12 percent in surgery/surgical sub-specialties; 187 or 7 percent specialised in psychiatry, 161 or 6 percent in obstetrics and gynaecology; 90 or 3 percent in pathology; 35 or 1 percent in radiology; 32 or 1 percent in preventive medicine and 41 or 1 percent in other areas of medical specialisation. These figures are enormous drain on the total health personnel stock of Nigeria.

Nigeria is generally recognised, on account of its share of emigrating health professionals, as a major health-staff exporting country. According to Nigeria's former Minister of State for Health, Mrs Halima Alao, the country lost 21,988 health workers to brain drain between 2000 and 2005. As at 2003, out of a total of 35,000 registered doctors, 10,000 migrated. Similarly, 20 percent of 10,364 registered pharmacists and 9,917 nurses and midwives out of 210,306 left the shores of Nigeria for the developed countries ([http://www.andnetwork.com/app?service/0/Homes/\\$StorySummary\\$0.\\$DirectLink\\$2&sp=127830](http://www.andnetwork.com/app?service/0/Homes/$StorySummary$0.$DirectLink$2&sp=127830)).

Despite the fact that the calculation of the stock of Nigerian physicians was put at 55,376, the truth is that this number is greatly exaggerated. According to the records of the MDCN, the active number of doctors with valid practicing license servicing Nigeria's over 140 million populations was under 14,000. This number included physicians who, even though had emigrated to other sectors especially politics, still found it prestigiously important that their names are circulated in the current registers of medical practitioners. In actuality,

therefore, the human resource crisis in the health sector as a result of brain drain is deeper than at first appears or projected by international organisations. A study of the data on training output and emigration rate of Nigerian doctors shows a negative relationship. For instance between 2002 and 2006, the output of Nigeria's 28 colleges of medical schools was at constant figure of 2,300 doctors per annum (NBS 2009: 200). On the other hand, the emigration rate based on request for certificate of good standing from physicians on their way out of Nigeria varied from 2,341 in 2005, 2985 in 2006 and 3567 in 2007 (AWHO 2008: 31). Not only is the number of physicians on their way out of Nigeria's health system on the increase, the rate of emigration far outstripped the rate of producing physicians.

The seeming intractability of communicable and non communicable diseases as well as their resurgence and renewed spread and the crisis facing the realisation of the health aspect of the MDGs are rooted in the human resource crisis in the health sector which was induced and sustained by brain drain. Brain drain has also, constrained the capacity of Nigeria's medical schools so much that instead of training output increasing, it has remained constant, and with renewed resurgence in the trend of emigration as our data have shown, there is danger of further contraction.

**Tables 4.10 and 4.11** show the migratory trends of Nigerian doctors and nurses respectively. Table 4.16 specifically shows a breakdown of Nigerian doctors who had requested for a certificate of good standing from the MDCN. Between 2005 and 2007 there was consistent increase in the volume of this request. Thus, from 2,341 requests in 2005, it rose to 3,567 in 2007. The data reveal that major destinations of these doctors were the countries of the developed world with the UK as the preferred destination.

**Table 4.10: Nigerian Doctors Who Requested for Certificate of Good Standing and Their Destination**

Country	2005	2006	2007
United Kingdom	979	1,236	1,236
Ireland	714	851	851
USA	122	189	189
Denmark	9	16	16
Brazil	-	-	4
South Africa	-	-	538
West Indies	304	384	384

Canada	136	176	176
United Arab Emirates	5	5	5
Singapore	6	6	10
Australia	49	86	86
Germany	7	12	12
Poland	1	3	3
Italy	2	6	6
Netherlands	5	11	11
Malaysia	2	4	4
Guyana	-	-	6
New Zealand	-	-	3
Nepal	-	-	2
Ghana	-	-	8
Russia	-	-	4
Libya	-	-	2
Ukraine	-	-	7
Liberia	-	-	2
<b>Total</b>	<b>2,341</b>	<b>2,985</b>	<b>3,567</b>

Source: AHWO 2008:31

**Table 4.11** shows data in relation to nurses seeking employment outside the country. In 2004, a total of 5,517 nurses sought employment outside Nigeria after having been fully trained. This figure rose to 5,695 in 2005 before plummeting to 1,977 in 2006. It picked up in 2007 to 3,194. Like the doctors, their preferred destinations were the countries of the developed world.

**Table 4.11: Nurses Seeking Employment Outside Nigeria from 2004 – 2006**

<b>Country</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
United Kingdom	2,500	2,600	750	94
USA	2,100	2,050	650	1,233
Ireland	750	855	450	510
Australia	55	60	75	-
Canada	50	60	12	130
British Columbia	10	11	3	-
New Zealand	20	21	5	-
South Africa	15	16	6	-
Ghana	8	10	7	-
Botswana	4	5	10	-
African Boards *	-	-	-	87
Other Boards **	-	-	-	1,140
Prince Ward Island	5	7	9	-
<b>Total</b>	<b>5,517</b>	<b>5,695</b>	<b>19,77</b>	<b>3194</b>

Source: AHWO 2008:30

\*African Boards (An addition of figures for Ghana, Botswana, South Africa, and other African Countries. This clarification was started by the Nursing Council from the 2006 data generation year)

\* \*Other Boards (An addition of figures for Australia, New Zealand, British Columbia & Prince Ward Island).

### **4.3: THE POLITICS AND ECONOMICS OF DIASPORAN INVESTMENT IN NIGERIAN DEVELOPMENT**

Foreign direct investment (FDI) is generally believed to be a fundamental source of, and a mechanism to, achieving economic growth and development through external investments. The contemporary conceptualisation of FDI has transcended the narrow precincts earlier erected around it, to wit, that FDI refers to investment by multinational companies (MNCs) with headquarters in developed countries”: (Thirlwall 1994, cited in Oyeranti 2003:11). Such a conceptualisation that exclusively links FDI to MNCs identified the components of FDI narrowly as comprising: (a) new equity from the foreign company in the home country to the company in the host country; (b) reinvested profits earned from the company and; (c) long- and short-term net loans from the foreign to the host company (Oyeranti 2003:12; Ukaeje 2003:20). MNCs, no doubt, drive FDI by commanding valuable FDI resources but there are other actors outside the sphere of over 65,000 TNCs in the world today (Balaam and Veseth 2005:377).

FDI, also referred to as FPI, (as they are used interchangeably) contemporaneously refers to investment made to create enterprises abroad or acquire substantial stakes in existing enterprises by foreign owners outside their countries. The characterisation of an investor has transcended the traditional IMF and OECD boundaries of a government, individuals, groups, incorporated or unincorporated enterprises, existing or new MNCs (Ukaeje 2003: ). The whole essence of FDI is the deployment of international capital to domestic economies for the achievement of two objectives for both the host country and the investors: for the host country, FDI unleashes development and for the investor, profit. While FDI, as a major component of international capital flow, had been projected as a desirable mechanism for economic development, African leaders chose not to adopt it as a post-independence strategy for economic development despite the challenges of industrialisation and balance of payment. The reluctance of the emergent African leaders to adopt FDI strategy was fuelled by certain empirical considerations: the rapacity of international capital and its forceful subjugation of the domestic economies as exemplified by the domination of German economy and elsewhere by American and European finance capital shortly after the World War II (Nkrumah 1968: 45). About the United States of America, Nkrumah (1968:59) avers, “the Marshall plan was used to push American imperialist penetrations into the fragmented German industries and financial institutions, into which it bought heavily.” Therefore, Africa leaders, including those of Nigerian, interpreted FDI as a strategy for neocolonisation. And

by popular conceptualisation, neo-colonialism was an anathema, a reversal of the gains of nationalism and pan-Africanism. Neo-colonialism was seen as the entrapment of newly independent states of the Third World bloc by erstwhile colonialists through the MNCS and their subsidiaries (Balaam and Veseth 2005:336). In other words, even though countries under neo-colonialism might have political independence, yet their economic sovereignty would be compromised to their detriment as neo-colonialist control occurred through economic and monetary means (Nkrumah 1968: ix).

The core of post-independence economic thinking was anchored on the notion that foreign capital is used for the exploitation rather than for the development of the less developed plots of the world (Nkrumah 1968: x). In other words, rather than international capital acting as a propeller to unleash the forces of development, it actually tended to create a neo-colonial state that was incapable of independent development. Okongwu (1986:45) argues that “we must realise that as our [Nigerian] economy is the largest in Africa ..., it is not in the progressive short-term self-interests of the advanced countries to assist us [Nigeria] towards self-reliant development.

The dominance of this type of worldview amongst Nigerian leaders made mixed economic ideology attractive and, indeed, underpinned the elevation of the state to the epicentre of economic activities. The state was not only prominent in the economic sphere but also took charge of, and formulated, policies and programmes as well as transformed itself into an engine of industrialisation. The private sector which ordinarily should have been at the helms of affairs in the economic sphere was relegated to the background. The dominance of the Nigerian economy by the state made the acceptance of the economic philosophy of import-substitution industrialisation (ISI) easy to buy into. It accepted the prescription that mass production of standardised manufactured goods model was the fastest means through which countries would attain industrial modernity. (Dibua 2006:155-6). As Ikpeze, Soludo and Elekwa (2004) admit, “following political independence in 1960, the successive governments [in Nigeria] adopted the import-substitution industrialisation and five year development plans (as was the case in most developing countries) and with financial assistance by international institutions”.

The paradox of ISI and development plan models adopted by Nigeria was that while the original motive was to achieve development without compromising the economic sovereignty, the result was the gradual erosion of every prospect of independent development and the suction of these economies into the capitalist system. ISI as an industrialisation strategy did not effectively utilise domestic comparative advantage to produce competitively.

In fact, goods produced under ISI were very expensive, indeed more expensive than foreign goods of comparable quality and depended upon protection from foreign competition for their survival (Kirkpatrick, Lee and Nixson 1984:197).

The seeming failure of ISI in Nigeria especially in producing competitively priced good, promoting linkages between different sectors of the economy, transferring technology and instituting a certain direction in Nigeria's quest for industrialisation exposed its inability to resolve its development dilemma. As a matter of fact, ISI deepened Nigeria's underdevelopment. Ake (1981:92) affirms that "... the attempt to industrialize by import substitution led to very heavy importation of inputs, which created debt burdens and balance of payments problems, and this in turn encouraged the intensification of primary production to pay for imports".

The economic crisis that enveloped, distorted and plunged the Nigerian economy into the brink of collapse led to the active intervention of IFIs with emphasis on liberalisation in its key sectors. Liberalisation, therefore, entailed the dismantling of the hitherto restrictive and protective frameworks in the Nigerian economy. The new development orthodoxy which was anchored on neoliberal policies projected trade and financial liberalisation as being essential to creating an open economy necessary to promote foreign investment and export-oriented economy considered essential for development. The economic success recorded in African countries such as Indonesia Malaysia and Thailand was linked to their adoption of these neoliberal policies (Keating 2001:6).

The change in the negative perception of FDI was occasioned by the constraints of economic crisis and the inescapable conditionalities imposed by the IFIs as basis for debt rescheduling and new loans (Wei and Balasubramanyam (2004:1). Thus, over the course of the 1990s, Nigeria had significantly broken down its protectionist walls and opened up its economy at the instance of the IMF and World Bank for foreign investment (Moss, Ramachandran and Shah 2005: 337). FDI policy was considered an attractive strategy because of its potentiality to augment capital constraints in the domestic economies. FDI presupposed the retreat of state domination in the economic sphere and ascendancy of the private sector. Generally, prior to SAP, the Nigerian economy was dominantly public sector-driven. Certain domestic contradictions including lack of vision amongst Nigerian leaders, rent seeking, corruption and undiversified, monocultural economic base stymied it in such a way that it lacked the necessary verve to sufficiently enthrone industrialisation. Decades of economic craftsmanship have failed to place Nigeria on the path of economic progress. As it is, the Nigerian economy are still characterised by:

Primary production, low share of world trade, low manufactured output and exports, low savings and investment, dominance of ODA and low private capital inflow, rapid population growth, dominance of public sector vis-à-vis a weak private sector, heavy external debt burden (CBN Briefs 2002/2003: 35).

These features made earlier attempts at industrialisation in Nigeria a failure and economic development impossible. It is instructive to note from the experience of Nigeria that development is not achievable through decrees or “legal fiat”. In spite of Nigeria’s legal frameworks to Nigerianise economic development by whittling down the dominance of foreign investors in its economy, it could not achieve appreciable progress in its economic indices as exemplified by its records of balance of payment crisis and presence of the IMF and World Bank in its economy.

Although there appears a balance of argument amongst analysts with regards to the role of FDI in kick-starting and sustaining economic development, the thrust of neoliberal basis for SAP entrusts FDI with positive complementarities. Successive Nigerian government since 1986 had keyed into, and held, FDI as the cornerstone of economic development. For instance, by 1999 Nigeria had signed six bilateral investment treaties (BITs) and eleven double taxation treaties (DTTS) and a host of domestic legislations aimed at encouraging the inflow of FDI (Yauri 2006:24). There appears a convergence of opinions amongst proponents and opponents of FDI: it could reasonably be inferred that there are certain fundamental requirements, economic and political, that drive foreign investment outside the considerations of the safety of investments and the quantum of return on investment. These include market size, labour costs, availability of high skill, level of external debts and political risks, level of infrastructural development and social factors (Ebajemito et al 2004:48-50; Yauri 2006:25-30). The Nigerian economy, in the main, lacked the bulk of these fundamental requirements and this was implicated as the reason for the low inflow of FDI during the SAP era. Since SAP, the structure of the Nigerian economy has remained virtually the same: monocultural, overdependence on oil, debt-ridden (until debt relief of 2005) and dependence on international capital for development. The apparent lack of dynamism in the Nigerian economy created a sub-optimal operating environment which inhibited the inflow of foreign investments. As Ebajemito et al (2004:45) affirm:

Owing to the unattractiveness of the Nigerian investment climate, characterised by high production costs; inadequate infrastructure; financial sector distress; pervasive corruption;

high rate of crime; spiralling inflation; political instability; and macroeconomic imbalance, limited foreign resources came into Nigeria, either in the form of foreign direct or portfolio investments or through official sources such as aid-in-grant.

Despite these shortcomings associated with the Nigerian economy and the attendant SAP reforms, the volume and spread of FDI envisaged by proponents of SAP did not materialise. In fact, the trend of FDI in Nigeria as in other parts of Africa was the deepening of the monocultural orientation of these economies by investing in enclave projects. For instance, all the investments going to Angola, Nigeria, Equatorial Guinea, Sudan and Chad were oil related, with the bulk invested in offshore facilities and those to Ghana, Zambia, Namibia, Botswana, South Africa and Tanzania were in large mining projects (Moss, Ramachandran and Shah 2005:340, Yakub 2005:54). Therefore, the FDI into Nigeria lacked the necessary ingredients of production-oriented investment to positively impact on its economic development.

But the failure of FDI to impact on Nigeria's economic development was not so much as explained in terms of the failure of SAP as the subsisting rigidities in the Nigerian economy. The perception of the Obasanjo administration (1999-2007) was the reconstruction of the Nigerian economy to make it not only attractive but supportive of investment. This was evident in the administration's shuttle diplomacy to the capital cities of major capitalist countries and its accompanying economic and trade policies. Both the economic and trade policies enunciated by former President Obasanjo were designed to give credence to the economic posture of the administration. They reflected neo-liberalism and intended to objectify foreign capital inflow, progressive liberalisation of the import regime to enhance competitiveness of domestic industries, integration of Nigerian economy through the establishment of liberal market economy, promotion and diversification of exports amongst others (Ekekwe 2008:37). The continuing economic crisis that bedevilled Nigeria especially the debt overhang gave former President Obasanjo little room for independent economic tinkering. Thus, from open hostility and opposition to the duo of WTO and IMF, Obasanjo embraced their catechism of neo-liberalism. And the product was the NEEDS, an adjustment framework introduced in 2003 as a medium-term strategy to enthrone economic development. NEEDS was SAP by another name as it incorporated the basic ingredients of SAP. The goal of NEEDS was to convert the Nigerian economy into a market-oriented economy that is private-sector-led, highly competitive and open. FDI was a central strategy of NEEDS especially with the new economic thinking that accorded it superiority over and

above foreign aid and loans as mechanisms of attracting international capital. Aremu (2003:4-5) asserts that:

... the present regime [Obasanjo regime 1999-2007] has placed so much emphasizes (sic) on encouraging FDI to strengthen Nigerian economy (characterized by low savings) so as to meet the required investment demand. It is the belief of the government that inflow of sizeable amount of FDI would result in higher factor productivity... .

This belief was translated into state policy as exemplified by single-minded implementation of NEEDS reform and shuttle diplomacy embarked by former president Obasanjo who travelled all around the world in the quest to attract FDI. Obasanjo's trips abroad were principally a public relations strategy to disabuse the negative perception of the international community about Nigeria as well as market its many investment opportunities. Adjunct to this was the strategy to reach out to the Nigerian diaspora. President Obasanjo held constant and routine interaction and dialogues with the Nigerian communities in every country he visited. He hoped to achieve three objectives by these dialogues with the Nigerian diaspora. The first was to inform them of the state of Nigeria in terms of developmental strides recorded so far. The second was sequel to the first point above and it was to enlist their support and co-opt them as foot ambassadors in the task of disabusing negative international perception about Nigeria. The third was to motivate them into availing themselves of the investment opportunities at home.

Considering the number of Nigerians abroad and the anecdotal evidence of their diversity in terms of occupation of strategic corporate and political positions all over the world, the Nigerian diaspora constitutes an important constituency to drive the FDI campaign. This realisation flowed from positive international experiences of such countries as Israel, India, China, and Mexico amongst others in converting their diaspora to engine of FDI inflow. It is instructive to note that foreign investors are not terrestrial beings operating outside the precinct of human civilization; they are rational beings who are influenced by certain considerations, especially perceptions of the diaspora about their home countries. The confidence of the diaspora in the economies of their home countries as exemplified by their own investments often boosts foreign investment. For instance, the confidence of the Chinese diaspora in the Chinese economy since its adoption of market-based economic reforms boosted foreign investment. It is estimated that Chinese diaspora accounts for about 15 percent of foreign investments in China presently (Balaam and Veseth 2005:371).

The outcome of former President Obasanjo's dialogues with Nigerians in the diaspora was the formation of an umbrella organization known as Nigerians in the Diaspora Organisation (NIDO) in 2001. The organisation was formed to "streamline the process of reengagement of the diaspora communities by the Nigeria government as well as to instil ethical consciousness and civic responsibility that will enhance socio-economic advancement of Nigerians and humanity in general" ([www.nidoamericas.org/about.php](http://www.nidoamericas.org/about.php)).

Nigeria's all out preoccupation with FDI can be periodised to coincide with the economic crisis that ravaged the Third World countries including Nigeria in the 1980s and for which the Bretton wood institutions of IMF and World Bank recommended the structural adjustment programme (SAP) as a panacea. SAP came with a bouquet of conditionalities which the IMF and World Bank assured would, if simple-mindedly implemented, open the floodgate of foreign investment. The core of SAP conditionalities was the dismantling of the state's overbearing influence in the economy. Prior to the economic crises of 1980s, the economies of most African countries including Nigeria, was dominated by the state with the private sector at the fringes. The ascendancy of the state in the economy was the fallout of the belief of the emergent African leaders that state aloofness to, and the conferment of unregulated control of the economy to private capital including foreign capital would not only erode its sovereignty but reverse their nascent independence. Rather than be seen as an instrument to achieve economic development, African leaders perceived FDI as a mechanism to consolidate exploitation and convert the new states into neo-colonies (Nkrumah 1968:x). Nigeria's reaction to this radical view was a cautious recognition of foreign capital in its development plan.

Nigeria's first Development Plan (1962:68) which was christened "open door plan" was anchored on the infusion of foreign investments and substantial external finance. The second National Development Plan however dispensed with this "open door" policy and pursued national self-reliance as state policy which entailed economic nationalism directed at:

The progressive elimination of foreign dominance in the national economy, not merely in terms of nominal financial ownership, but really in terms of the level of managerial and technological control. The validity of this statement derives from the fact that the interest of foreign private investors in Nigerian economy cannot be expected to coincide at all times and in every respect with national aspirations. A truly independent nation cannot allow its objectives and priorities to be distorted or frustrated by the manipulations of powerful foreign investors (FGN 1970:33).

While the first National Development Plan anchored the realisation of the plan on external finance input of 50 percent, the second National Development Plan scaled it down to 25 percent. And out of the projected total expenditure of ₦4.9billion, the second plan proposed public sector investment of ₦3.3billion and private sector investment of ₦1.6billion (Obi and Obikeze 2005:73). The quest for national self-reliance in the development programme of Nigeria made the reordering of the economy imperative. Nigerian policy-makers, under the influence of monumental receipts from favourable oil prices, took a second look at the composition and ownership structure of investments in the Nigerian economy and concluded that it ran in the face of its new policy direction of national self-reliance. This incongruence between subsisting reality and desired policy thrust necessitated a reorganisation in the national economy that eventually neutralised the dominance of foreign capital. The new economic policy found protection and strength in the political ideals of patriotism and nationalism: the government erected legal frameworks that supposedly put the economic destiny of Nigeria in the hands of Nigerians.

The Nigerian government anchored its economic reclamation project of Nigerianising investments on the erection of legal frameworks. Thus, the Nigerian Enterprises Promotion (NEP) Acts of 1972, 1977 and 1987 respectively were designed to give legal concreteness to its economic nationalism. Usoro (1983:137) describes the Nigerian Enterprises Promotion Act of 1972 as the “most radical and effective measure in the transition from foreign dependency to national economic self-reliance.” The NEP Acts classified all enterprises into three schedules: enterprises in schedule I were exclusively reserved for Nigerians; foreigners could invest up to 40 percent in the equities of enterprises in schedule II and up to 60 percent in enterprises in schedule III which comprised enterprises employing high level technologies. But starting from the 1980s, there was considerable shift of perspective in many developing countries about the place of FDI in development. Nwozor (2008:11) identifies three factors as spawning this shift namely; the economic crisis that engulfed the majority of these countries including Nigeria, the debilitating external debt and the growing importance of the IMF and World Bank with their new orthodoxy about the ingredients of economic development.

The economic crisis of the 1980s which made the Nigerian economy not only insolvent but incapable of meeting its domestic and international obligations necessitated the adoption of adjustment measures. The major thrust of SAP was the rolling back of the state and the bringing in of the private sector as the pivot of the economy. To this end, SAP evolved a set of policy measures aimed at opening and diversifying the economy. These policy measures included the devaluation of the national currency, commercialisation and

privatisation of state-owned enterprises (SOEs), deregulation and liberalisation of vital sectors of the economy monopolised by the government and overhauling of the tariff structure. The implementation of these measures meant the dismantling of the protectionist architecture earlier erected. Apart from being a major condition for rescheduling Nigeria's debt burden, it was envisaged that it would pave the way for the influx of foreign investors. The point was made by the IMF/World Bank and held as infallible economic truth by the Nigerian government that FDI was superior to foreign loan and that what was needed for an unfettered influx of FDI was the religious implementation of SAP. Proponents of SAP argued that even though greatness abounded in Nigeria on account of its abundant human and material resources, the key tool needed to ignite the spark necessary for development inferno - international capital - was lacking. In other words, what Nigeria needed to boost its development programme was access to the international capital market as well as foreign private investment markets (Aremu 2005:4). SAP dictated certain things which Nigeria must do, certain sacrifices it must make and a certain path it must take if the Nigerian economy must attract FDI.

The path it must take in addition to adopting the policy measures of SAP was the dismantling of its protectionist regimes and the opening up of the economy. This was necessary because the logic of indigenisation was in total opposition to the logic of FDI. The domestic restrictions imposed on the ownership and control of investments through the Indigenisation Acts of 1972 and 77 were antithetical to foreign investments. Notwithstanding the lofty objectives of indigenisation policy which included the creation of opportunities for greater participation of Nigerians in the economy as well as railroading foreign capital into higher technology areas, Vision 2010 Committee report (1997:63) rightly concludes that "while successful in part, indigenisation did not generally shift control to Nigerians and it significantly reduced foreign direct investment and interest in Nigeria".

Apart from the Indigenisation Acts, there were other impediments to the free inflow of foreign investments, foreign capital and also repatriation of dividends. Sofowara (2003:141) lists these impediments to include: the Exchange Act of 1962 and the Securities Exchange Acts of 1988 and the Domiciliary Account and Second-Tier Foreign Exchange Decrees of 1985 and 1986 respectively. The seriousness which Nigeria attached to FDI led to the adoption of certain specific policies. These policies spanned the abrogation of anti-investment legislations, the creation of conducive investment environment in terms of infrastructural facilities and the institutionalisation of investment incentives. The Nigerian government overhauled its legislations by dismantling those legislations that constituted

bottleneck to free inflow of FDI. Thus, the Nigerian Enterprises Promotion (NEP) Acts No. 34 of 1987 and that of No. 7 of 1995 were promulgated to abrogate NEP Acts of 1972 and 1977. NEP Act No. 34 of 1987 permitted public companies quoted on the Nigerian Stock Exchange to issue for subscriptions non-voting paid up shares to Nigerians and foreigners alike (Sofowora 2003:141). In addition to this, the Nigerian government set up such legislations as:

- a. The Privatisation and Commercialisation Decree No. 25 of 1988 and Decree No. 28 of 1999 (to transfer the control of the economy to the private sector)
- b. The Companies and Allied Matters Decree of 1990 (modalities for company registration and conversion of SOEs and public system).
- c. The Nigerian Investment Promotions Commission Decree No. 16 of 1995.
- d. Foreign Exchange Monitoring Decree No. 17 of 1995 (which repealed under its S.37, the Foreign Exchange Control of 1962 and its amendments namely, the Exchange Control (Anti-Sabotage) Decree No. 7 of 1984, the Foreign Currency Domiciliary Account) Decree No. 1 of 1985 and the Second-Tier Foreign Exchange Market (SFEM) Decree No. 23 of 1986.
- e. Nigerian Investment Promotion Commission (NIPC Act of 1995) to provide and oversee the regulatory framework for investment transactions. Aremu (2003:61) underpins the importance of this institutional capacity to the competitive investment environment globally especially amongst developing countries and the inevitable need to adopt promotional strategies to lure foreign investors.
- f. Investment and Securities Act 1999 which repealed the Securities and Exchange Act 1988; the Lagos Stock Exchange Act, the Nigerian Enterprises Promotion (Issue of Non-voting Equity Shares) Act 1990 and Part xvii of the Companies and Allied Matters Act 1990.

The subsisting economic crisis in Nigerian in 1999 led the government to adopt a new adjustment programme tagged NEEDS. NEEDS was the same thing as SAP in every essential features except just in name. Like SAP, NEEDS laid emphasis on the restructuring of the domestic economy as a necessary condition for the attraction of FDI. The restructuring was hinged on the liberalisation of key sectors of the economy and the privatisation of SOEs. The Nigerian government believed that sizeable inflow of FDI results in higher factor productivity (Aremu 2005:5) and therefore anchored NEEDS on the correlational logic that the more open and far removed the state is from the epicentre of the economy, the more the FDI inflows.

Former President Obasanjo (1999-2007) travelled uncountable number of times to major capital cities of the advanced economies to woo foreign investors. In an address to the 54<sup>th</sup> session of the UN General Assembly, President Obasanjo announced that:

Our administration has initiated policies aimed at revitalizing the economy in order to create an enabling environment for investment and economic growth. We have also put in place appropriate legal framework for the protection of foreign investments and repatriation of legitimate profits.

Other measures we have taken include:

- (i) a vigorous anti-corruption campaign.
- (ii) the promotion of transparency and accountability in public life.
- (iii) the abolition of decrees and regulations which hindered the inflow of foreign investment.
- (iv) the privatization of key state enterprises such as electricity and telecommunications.
- (v) the generation of opportunities for employment and income savings for domestic investment.
- (vi) legislation and measures to redress obvious cases of neglect and injustice done to ethnic minorities, particularly in the oil-producing areas of the Niger Delta region and to deal with the problems of the environment.
- (vii) investigation of past of human rights violation with a view to promoting and protecting fundamental freedoms.
- (viii) strengthening the capacity of the law enforcement agencies to promote law or order as well as security or deal more effectively with the problem of drug trafficking (Selected Speeches of Obasanjo Volume 1 2000:192).

Despite the subsisting shortcomings in the resolution of certain factors necessary to make Nigeria's investment climate competitive, the Nigerian government has shown remarkable commitment to attracting FDI through the diaspora. There has been progressive provision of the relevant infrastructure needed to make Nigeria investment-friendly and indeed an investor's haven.

The unprecedented burgeoning of the remittance flows worldwide is not an isolated occurrence rather it is attributable to new levels in the migration of highly skilled personnel from the developing to the developed countries. In other words, remittance flows are tied to the migration flows. IFAD (2007:8-16) estimates that there were about 150 million migrants

in 2006 comprising of over 50 million migrants from Asia/Oceania axis, 30 million migrants apiece from Africa, Latin America /Caribbean and Europe (transition economies) and 10 million from the Near East. The combined estimated remittance flows from these migrants to their families in the developing economies in 2006 were US\$300 billion. The driving force behind this huge remittance outlay was the relaxation of hitherto strict immigration policies as well as policies on remittance outflows. **Table 4.12** shows the breakdown of the global migrant population in 2006. While Asia/Oceania topped the migrant population data by accounting for 32 percent, Africa came second with 21 percent. Europe, Latin America and Near East accounted for 20, 19 and 8 percent respectively. But despite Africa’s high migrant population, it only accounted for 13 percent of global remittances.

**Table 4.12: Regional Distribution of Migrants and Remittance Stock,  
2006**

<b>Region</b>	<b>Migrant Population</b>	<b>Percentage of Migrant Population</b>	<b>Total Remittances (US \$Million)</b>	<b>Percentage of Remittances</b>
Africa <sup>1</sup>	32,808,000	21	38,611	13
Asia/Oceania <sup>2</sup>	50,830,000	32	113,055	38
Europe <sup>3</sup>	31,374,000	20	50,805	17
Latin America and the Caribbean <sup>4</sup>	30,403,000	19	67,905	23
Near East <sup>5</sup>	12,594,000	8	28,449	9

<sup>1</sup>Includes Central, Eastern, Northern, Southern and Western Africa; <sup>2</sup>Includes Central, Eastern, Southern, South-eastern Asia and Oceania; <sup>3</sup>Includes Central Europe, Russian Federation and Eastern Europe; <sup>4</sup>Includes the Caribbean, Central America, Mexico and South America; <sup>5</sup>Includes the Caucasus, Middle East and Turkey.

Source: *IFAD* (2007: 8-16)

The relaxation of financial policies which enabled migrants to remit money to their home countries is part of the overall strategies of the developed countries to keep the brain drain channel open. Contemporary migration is dictated by two interrelated needs: needs of the individual and needs of the state. The individual migrant’s motivation is ultimately encapsulated in the quest for self-survival in the face man-made threats spanning economic,

political, socio-cultural spheres as well as natural disasters. Similarly, the motivation of the state to encourage migration is locatable in the twin quest for self-survival and ascendancy in the comity of states. This policy shift in the immigration policies of the developed countries was in response to several domestic challenges that had far-reaching implications for their position in the world capitalist system. The first was the challenge to maintain their labour power in line with domestic expansionary pressures; the second was the challenge of aging population in an ever-expanding world; the third was the challenge of maintaining the international status quo and the fourth was the challenge of maintaining prevailing international comparative economic advantage.

The inequality that exists among countries within the modern world system and manifesting in differentials in life opportunities and quality of life in these economies provides a veritable basis for the unidirectionality of migration. In other words, attracting labour to the developed countries does not constitute a problem as higher wage levels in the developed countries, act as sufficient inducement. There appears to be contentions about the correct interpretation of the overall benefits of migration (from the developing countries to the developed countries). These contentions are products of variegated representations of the locus of the effects of migration of skilled personnel. There exists a tapestry of interpretations which either labels migration as a veritable symbiotic tool of mutual development or condemns it as a parasitic exploitation of the human capital stock of the Third World countries occasioned by weak domestic capacity, which by itself was inflicted by the developed countries. Migration has been identified as possessing pacifist attributes. As Schmid ( nd ) argues “in many Latin American and Caribbean countries, emigration seems to have helped to alleviate tensions between population trends and job creation as well as those arising from socio-political, ethnic and religious conflicts or from acute forms of environmental degradation”. In other words, rather than being classified as brain drain, migration of Third World citizens was depicted as a safety-net to douse the inevitable tension from mismatch between expectations and actual opportunities in their economies. A variant of the positivist argument with regard to brain drain is the benefits derivable by home countries because of the specialised skills acquired by their citizens in the diaspora. The argument has been encapsulated in the phrase – brain gain. Spatafora (2005:70) sets out this argument thus:

On the positive side, migrants often find better opportunities in their destination countries: they may also learn skills and gain experience that will prove valuable if they repatriate. Further, emigration may encourage the development of commercial

networks, promote trade and investment flows, and lead to significant diaspora philanthropy.

No doubt, the increasing global mobility amongst population has not yielded equal benefits to all concerned. While the labour exporting countries of the developing world contend with brain drain which seriously undermines their capacities to face the challenges of development, the labour-receiving countries of the developed world, on the other hand consolidate their edge in global competitiveness under the auspices of this imported labour. The loss to the Third World is the gain of the developed countries. Based on statistics, it is estimated that there are more African scientists and Engineers in the USA than in the entire continent. Similarly, there are more Nigerian doctors in other parts of the western world contributing to the health care of these nations than in Nigeria (Woldetensae 2007:3).

Attention has shifted from the negative effects of migration to its positive impacts. Beyond the prospects of brain exchanges and brain gain associated with the return of highly skilled Africans to settle in their home countries, emphasis is placed upon the burgeoning atlas of remittances. Remittances are portrayed as being more than compensatory for whatever loss the emigrating countries might have suffered (Spatafora 2005:84). Worldwide remittances have been on the rise. From an estimated US\$25billion in 1990, remittances have grown beyond imagination to US\$268 billion in 2006 and US\$337 billion in 2007 (Taiwo 2007:180). The monumental increase in the volume of remittance portfolio has been attributed partly to increased migrants' interest in sending money home as a result of the winds of globalisation which substantially blew off certain traditional barriers that had hitherto constituted a stumbling block and partly to improved reporting system (Englama 2007:8). But outside of these factors, a major determining factor that directly impacted on the increased remittance flows was the relaxation of immigration policies in the developed countries. Not only did it regularise and legitimise the status of hitherto illegal immigrants, it opened the door to new migrants with favourable set of advantages including the freedom to remit a certain percentage of their earnings. The effect was a corresponding increase in the population of migrants which is currently estimated to be in the neighbourhood of 150 million people (IFAD 2007:2). Although some scholars have dichotomized and attributed the factors that contributed to the increased volume of remittances worldwide to overflowing domestic conditions such as salary levels of the migrants and general living condition in the host country as well as conditions in the home countries such as black market premium on exchange rates and stable or unstable economic and political conditions (Taiwo 2007:19),

such factors as liberalisation of population mobility with its attendant consequence of mass exodus of skilled personnel in search of greener pastures consolidated it. It is this increased migrant population, owing to the international commodification of labour that significantly contributed to the rise in the remittance portfolio. IFAD (2007:2) has reported that the value of remittances has remained unchanged as migrants typically send out remittances in volumes of US\$100, US\$200 or US\$300 at a time. Prior to these changes that liberalised the bottlenecks associated with international financial transactions, migrants had utilised informal channels as a means to remit money. Internationally-supported financial liberalisation helped to reverse this trend and thus spawned the ground for the utilisation of official mechanisms by migrants to remit money to their home countries. The increasing predilection to use official sources to remit money and improvement in financial reporting system enabled the collation of remittance information. It is however still generally held that the informal channels still account for substantial percentage of remittances. According to Taiwo (2007:18), out of US\$337 billion recorded in 2007 as value of worldwide remittances, informal and unreported remittances were estimated at US\$86 billion representing 25.52 percent and formal channel for US\$251 billion or 74.48 percent.

There are no diametrically opposed conceptualisations of what constitutes remittances. Remittances are simply inflows (financial and otherwise) which results from a country's émigrés. The constituents of remittances include monetary and non-monetary items that migrants earn while working abroad and later sent to recipients in their home country. In other words, remittances are the totality of transfers sent to host countries by migrants. In its computations of total remittances, the IMF recognises and includes the sum of three items or components: workers' remittances (current transfers made by migrants who are employed and resident in another economy and therefore constitutes part of current transfers in the current account); compensation of employees (comprises wages, salaries and other benefits earned by non-resident workers for work performed for residents of other countries. This forms part of the income component of the current account) and migrants' capital transfer (includes financial items that arise from the migration of individuals from one economy to the other and forms part of the capital account) (Taiwo 2007:31-32).

Remittances can be classified into three distinct categories namely: financial, social and in-kind. Financial remittances cover the bulk of inflow of cash and other financial transactions which migrants send either through formal or informal channels. Another category of remittances is social remittances which comprise the whole gamut of socio-economic assistance in such areas as health, education, building of infrastructure etc rendered

by the migrants in the diaspora to their local communities either directly or through hometown associations. Englama (2007:6) considers social remittances as important as financial transfers since the acquired values and norms inculcated by migrants are transferred to their home countries and thus contribute to development. Remittances-in-kind refer to goods that are sent home by the diaspora to their home countries. These transfers take the form of clothes and clothing items, medicines, toiletries, electronic equipment, automobiles and other consumer goods. This aspect of remittances is acknowledged to constitute a very large chunk of transfers under the informal channels.

The importance currently attached to remittances inhered from the recognition of their increasing relevance and dominance in the portfolio of foreign financial inflows to developing countries' economies. Remittances have been increasing in leaps and bounds in contradistinction to other external sources of capital flows to the developing countries. Remittance inflows increased in geometric proportions and thus far outstripped the inflow from other sources such as official development assistance (ODA), FDI and portfolio equity. IFAD (2007:6-7) notes that a majority of the countries in the developing regions from Asia and Oceanic, Latin American countries, Europe, Near east to Africa showed annual remittance inflows of more than US\$1 billion with a further number of countries receiving more than US\$500 million. Of all the regions of the world, Latin America and the Caribbean are the highest recipients and destinations of remittances.

The global remittance environment is fraught with challenges. The key challenge appears to be the mechanism through which remittances could be transmitted to recipients in the home country in the face of ineffective and often non-existent institutional capabilities. Migrants have risen to the occasion by evolving several media outside of official channels. Often the decisions to exploit either the formal or informal channel are rooted in several socio-political and economic considerations. Englama (2007:7); Tomori and Adebisi (2007:300) have identified such factors that influence the choice of remittance channels among migrants as: the cost of transactions, speed, security of funds, geographic proximity/accessibility, individual socio-economic characteristics of their household members, levels and type of economic activity in the sending and host countries, differential interest and exchange rates and the relative efficiency of the banking system. Formal channel constitutes all the officially recognised institutions empowered to carry out financial transactions such as the banking system and pseudo-banking and financial institutions. A major feature of the formal channel is the documentation of transaction: such documentations enable the collation of the pattern of remittance flows as well as the volume of remittances.

Informal channel, on the other hand, constitutes extra-legal means through which migrants remit money to designated recipients. Informal channel is an alternative means of remitting money and involves the circumvention of the officially recognised institutions for financial transactions. Cash transfers within the ambit of the informal channel utilises personal relationships through business people, courier companies, friends, relatives or oneself to get money across to designated recipients (Tomori and Adebisi 2007:305; Osili 2007:104). Englama (2007:7) attributes the continued patronage of informal channel to several factors including constraints caused by banking and foreign exchange regulations, low outreach and insufficient protections to recipients by extant laws.

The danger associated with informal channel as a means of inter-state cash transfers has generated more than a cursory interest amongst frontline western states since the September 11 2001 terrorist attacks on the World Trade Centre (WTC) and the Pentagon in the United States and sundry terrorist attacks on major European states and tourist rendezvous worldwide that recorded heavy western patronage. Informal channel provides an escape route for money launderers, drug barons and terrorists. In spite of the pervasive influence of informality within the global remittance environment, there are many agencies, money transfer companies and financial institutions jostling for patronage as a window through which remittances could be sent. Their ineffectiveness, so far, to continuously bridge or narrow the gap between the use of formal and informal channels by prospective remitters is associated with diverse factors ranging from high transaction costs, monopolistic operations of the MTOs, underdeveloped or inadequate ICT backbone to facilitate seamless operations and domestic regulations. There is no worldwide uniformity in the rates or cost of remittance transfers. The determination of each region's transfer cost is based on such factors as the state of ICT, the population of migrants, the volume of remittances, domestic regulations, geographic proximity and other socio-economic considerations.

**Table 4.13: Regional Remittance Transaction Costs, (2006) (US\$ Million)**

	<b>Africa</b>	<b>Asia &amp; Oceania</b>	<b>Europe</b>	<b>Latin America &amp; the Caribbean</b>	<b>Near East</b>
Cost range of sending US\$ 200	8-12%	3-12%	6-12%	6-8%	7-12%

Source: IFAD 2007

**Table 4.13** shows lopsidedness in the remittance transaction costs. The Latin America and Caribbean region enjoy the lowest transaction costs in the world which average 7 percent to send US\$200. Contrarily, Africa pays the highest transaction costs of 10 percent to send US\$200. The costs of sending remittances to Asia and Oceania, Europe and Near East average 7.5 per cent, 9 per cent and 9.5 per cent respectively to send US\$200.

A juxtaposition of the volume of remittance transactions and average transaction costs and further analysis reveals that higher volume regions enjoy relatively lower transaction costs. This shows that the higher the volume the most likely it is for a reduction in the transaction cost. But this pattern did not seem to be true for Africa when examined against the posting of Near East region. While the worth of Africa's total remittances was US\$38.6 billion, that of the Near East was US\$28.4 and yet transaction costs to send money to Near East was lower (9.5 per cent) than Africa (10 per cent). IFAD (2007:9) links Africa's disproportionate remittance transfer costs to two major challenges: high rates of informality and a regulatory environment that favoured monopoly. As it explains:

Most African countries restrict outbound flows of money unless used for trading and money transfers to banking depository institutions. As a result, informality emerges as a solution to remit. Another effect, however, is the persistence of monopolies on transfers by banks and the few money transfer operators (MTOs) (IFAD 2007:9).

The over-regulation of foreign exchange transactions by African countries created, sustained and propagated informality to such an extent that it is, more or less, institutionalised as the need to remit money must be met. For instance, Nigeria's Foreign Exchange Act established a very low limit of N5, 000 (less than US\$35 in current exchange rate) as the unrestricted allowance for outbound transfers. This limitation was essentially a strategy to restrict transfers (Orozco and Millis 2007:7).

Despite the legion of international MTOs within the global remittance environment, each region is peculiarly monopolised by an MTO. For instance, 70 percent of the US\$10.3 billion volume of remittances to Western Africa in 2006 was handled by one MTO (Western Union) whose grip on this sub-region was enhanced by its exclusive agreement with agent banks. The issue of monopolisation of regions is directly related to subsisting regulatory environment and the openness or otherwise of foreign exchange transactions. As IFAD (2007:7) points out:

Throughout Latin America and the Caribbean, half of the licenced money transfers are handled by banks whereas in Central Asia, Africa, the Southern Caucasus, Eastern Europe and parts of South-eastern Asia, the share rises to almost 100 percent, because regulations only permit banks to make such transfers.

The dominant player in Nigeria's remittance market is the Western Union which accounts for nearly 80 percent of transfers even though there are three other players (Orozco and Millis 2007:16; IFAD 2007:9). Western Union dominates both inbound and outbound transfers through its exclusive agreement with banks. Out of twenty four (24) banks operating in Nigeria, fifteen are agents for Western Union, five for Money Gram and one for Coinster and Vigo Corporation (Vigo is a subsidiary of Western Union) apiece. Apart from the exclusivity clause in Western Union's operations, its dominance in the remittance market is a product of several factors such as remitters' perception of efficiency, accessibility, reliability and payment in originating currency. Based on Western Union's 2006 Annual report, it maintains and provides worldwide money transfer services to approximately 270,000 agent locations in over 200 countries. Similarly, MoneyGram, another major player in the remittance market, operates 125,000 locations across over 170 countries (Englama 2007:7). A survey by Orozco and Millis (2007:9) regarding remitters' preferred money transfer channels showed that 78.26 per cent of transfers were done through the Western Union and 15.78 per cent through the Money Gram. The rest MTOs shared among them the remaining 6.36 percent.

There is no uniformity in the effect of remittances within the developing world because of the differing perception of migrations amongst countries of the developing world. These differing perceptions underscored the policies adopted or not adopted to harness remittance inflows. Philippines, Mexico and India, have well-laid out policies which not only encourage their nationals in the diaspora to remit money back home through special incentives but also have frameworks to harness these remittances and transform them to agents of development. Mexico, for instance, has a framework that adds value to its remittance inflows in such a way that a dollar remittance produces about US\$2.90 in GDP and an increase of about US\$3.20 in economic output (cited in Taiwo 2007:20). Contrasted with Nigeria, remittances were not considered a source of foreign exchange that could contribute to national development until 2002. Prior to this period, Haas (2006:15) notes that "Nigeria has never pursued a migration or a remittance-led development strategy, as has been the case in countries with far higher rates of out-migration". The major reasons for lack of

policy initiatives in the area of harnessing positive fallouts of migration especially remittances include: dearth of data on remittances owing partly to policy somersaults and pervasiveness of informality in remittance transfers; dearth of data on the actual population of Nigerian migrants and the perception of government which tended to see migration as a drain on its human resources and by extension its developmental agenda. However, the current policy initiatives about remittances can be periodized at the inception of democratic rule in Nigeria in 1999.

One of the greatest attractions associated with remittances and for which it is considered superior to other sources of external finance such as ODA and private capital flows, loans is its human face. Remittances are a product of benevolent philanthropism. In other words, motivations to send remittances are powered by the considerations for the recipients' improvement. Another attraction of remittances is that it is not so much a product of international political permutations as they are deployed to serve more or less microeconomic purposes. Another attraction of remittances is that its flow is more or less stable as it is often transferred in manageable volumes of between US\$200 and US\$500 per remittance and do not exhibit the fluctuations often associated with private capital flows (IFAD 2007: 2; Spatafora 2005:72).

But the truth is that even though the volume of remittances has been on the increase, its flow cannot be ascribed with stability as factors in the host and home economies as well as the international arena impact upon it. Therefore any framework which sees remittances as a stimulus for development must recognise their volatility as a source of foreign finance. Beyond that, remittances can never compensate for the loss of human capital. A "balance of trade" approach to immigrants reveals that developing countries generally have deficits which connote that they are disadvantaged. A corollary to this development is the high cost to these economies to replace emigrants. Even for a developed country like Canada, which is a net receipt of skilled immigrants, the emigration of its skilled personnel, especially to the US has been dubbed a brain drain and roundly believed to be "real and costly" to the Canadian economy (De Voretz and Laryea 1998:23).

Remittances, until recently, were not factored into the foreign exchange projections of African countries especially Nigeria. Indeed, none of Nigeria's developmental models recognised or incorporated migration or remittance-led development strategy. Instead the prevention of migration was the major preoccupation of government policies as migration was closely associated with socio-economic dislocations (Haas 2006:15). The position of government was not completely out of sync considering that out-migration was the response

of a cross-section of Nigerians to the socio-economic contradictions that confronted the country beginning from the 1980s. Tomori and Adebisi (2007:302) aver that international migration was not a recent phenomenon in Nigeria as it pre-dated its independence. The difference between migration of yore and contemporary migration was the motive: while the motive for pre-1980s migration was to acquire academic and associated laurels, contemporary migration is associated with economic survival occasioned by domestic economic crisis. As has been aptly delineated:

The turning point seems to be the collapse of the petroleum boom in the early 1980s and the attendant economic hardship faced by Nigerians. Subsequently, they started seeking employment opportunities in other countries, while many who did not necessarily study outside the country began to leave (Tomori and Adebisi 2007:302).

The Central Bank of Nigeria (CBN) did not collate data on remittances nor were they factored into the country's development dynamics until 2002 when there was a conscious policy shift on the part of government to appropriate the gains associated with remittances for national development. Prior to this period, Nigerian policy thrust only recognised reverse-migration as the only positive aspect of migration. This position inhered from the perception that emigrants were drain on the country's resources, a position that has undergone metamorphosis as a result of the recognition that migrants are carriers of the development germ. In other words, migrants transfer knowledge to their home country.

In spite of the attributes of remittances and their potentiality to be a positive force in the march to development, they have not been seen to impact on Nigerian economy. The most obvious reasons are their stagnation at the micro-level, their consumptive preoccupation and the lack of policy framework to adequately harness them for productive and investment purposes. Therefore there must be conscious efforts to dismantle the consumptive preoccupation of remittances and make them investment-oriented, that is, make investments the primary target of remittances.

Nigeria is generally regarded as a mobile country owing to the number of its citizens that are "dispersed" abroad. Despite lack of agreement amongst scholars about the number of Nigerians in the diaspora, we estimate that about 7.25 million Nigerians, or 5 percent of its population, are outside the shores of Nigeria. The yearly increment in the volume of remittances from the Nigerian diaspora is a product of two factors: increased stock of émigrés; and, improved disposition to remit money due to positive reforms in the domestic

money transfer environment. The emergence of Nigeria as a major remittance recipient in the world opened new possibilities about the relevance of the diaspora in the schema of Nigeria’s quest for FDI. **Table 4.14** shows the UNDP estimation of Nigeria’s emigrant population. This figure is considered too low. Other estimations put Nigeria’s emigrant population at between 5 and 17 million. Considering Nigeria’s position on the global top ten remittance receiving countries, the UNDP figure appears incongruent.

**Table 4.14: Nigeria's Emigrant Population, 1960 to 2010**

Year	Number (in thousands)
1960	94.1
1990	447.4
2005	972.1
2010	1,127.70

*Source:* UNDP Human Development Report 2009.

The official recognition of the potentials of Nigerians in the Diaspora as veritable agents of economic development was a relatively recent phenomenon, indeed a legacy of the democratic dispensation that started in 1999. Following years of “pariahdom” as a result of international sanctions imposed on Nigeria, foreign investors more or less blacklisted the country. Several factors such as Nigeria’s poor human rights records, authoritarian regimes and extrajudicial killings as well as negative and offensive international media attention as a result of pervasive corruption created the basis for international opprobrium. As such, the Commonwealth, the UN and other leading members of the OECD countries had imposed one form of sanction or the other on Nigeria. And as at the time President Obasanjo came into power in 1999, Nigeria was riding under the weight of these sanctions as exemplified by its economy which was on the brink of collapse.

Apart from Nigeria’s peculiar domestic problems that necessitated its being blacklisted in the comity of nations, certain global conditions drastically slowed down the inflow of FDI to developing countries including Nigeria. The quest for growth and development in the face of contracting FDI and Official Development Assistance (ODA) created the room for creativity in expanding the sources of FDI. Atkinson identified eight

new sources of international funding of domestic investment and these included increased remittances from emigrants. Others are global environmental tax, currency transaction tax, creation of new special drawing rights (SDRs), international finance facility, increased private donations for development, global lottery and global premium bond (Awolaja 2005: 53-56).

**Table 4.15a: Contributions of Remittance Flows to Nigerian Economy**  
(US\$ Million)

	2004	2005	2006	2007	2008	2009
Remittances	2,262.3	6,461.5	10,541.6	17,919.5	19,176.7	19,992.3
Population (million)	129.9	133.5	140.0	144.5	149.1	153.9
GDP Current Market Prices (₦ Billion)	11,673.6	14,735.3	18,709.6	20,657.3	24,296.3	24,712.7
GDP current Market Prices (US \$Billion)	87.4	88.37	144.49	176.77	191.80	170.31
Exchange Rate (N/\$)	133.5	132.15	128.65	125.83	118.92	148.90
GDP Growth Rate	6.6	6.5	6.0	6.5	6.0	6.7
Annual Growth Rate of Remittances	113.1	185.6	63.1	70.0	7.0	4.3

Sources: CBN Annual Reports 2005:xxxiv; 2007:228; 2008:251; 2009:xxxix, 26.

**Table 4.15b: World Bank Data on Nigeria's Remittance Flows**  
(US\$ Million)

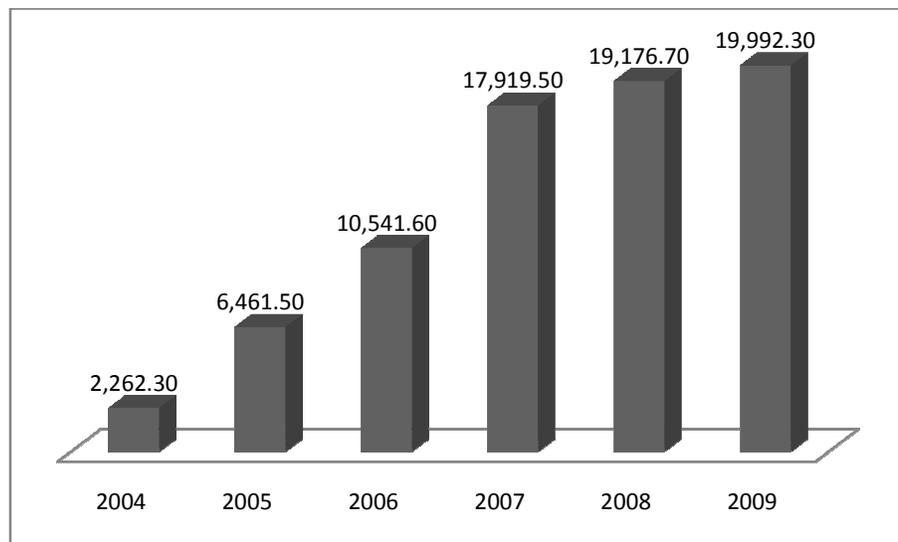
Nigeria	2004	2005	2006	2007	2008	2009	2010 <sup>e</sup>
Inward Remittance Flows	2,273	3,329	5,435	9,221	9,980	9,585	9,975

e: estimate. Source: World Bank 2011:195)

**Tables 4.15a and b** showcase Nigeria’s remittance flows. The difference in the CBN’s computation and that of the World Bank inheres from differences in computational methodology. The sets of data in both Tables have one thing in common: since 2004, there has been steady and consistent increase in remittance flows to Nigeria which puts Nigeria in the bracket of top ten remittance recipients in the world.

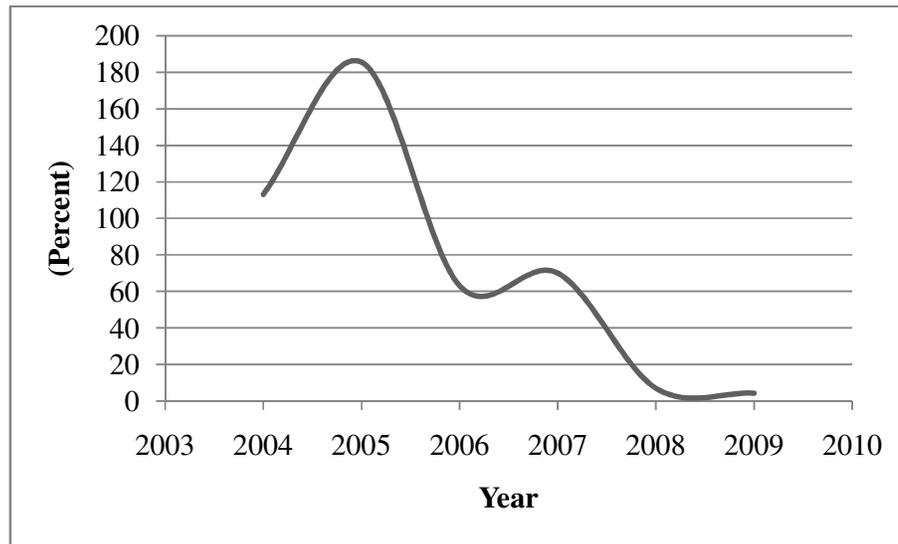
Former President Obasanjo’s shuttle diplomacy to secure Nigeria’s reintegration into the mainstream of international system had two phases. The first phase was the period covering his designation as president-elect and that was between February-May 1999 and the second phase was as president between May 1999 and May 2007. It was in the first phase of his shuttle diplomacy he encountered the Nigerian diaspora in city after city and thus recognised their potential as a source of national development. The idea to harness diaspora contributions to national development crystallised at this period and was motorised by the logic of home-bias investment – that migrants are more likely to continue to invest in their home countries despite economic adversity than foreign investors as well as the logic of investment ambassadorship - that foreigners would develop confidence in the domestic economy if they see substantial investments of the citizens in the local economy.

**Figure 8: The Trend of Nigeria's Remittance Flow (US\$ Million)**



Sources: *CBN Annual Reports Various Years.*

**Figure 9: Annual Growth Rates of Remittances, 2004-2009**



Sources: *CBN Annual Reports Various Years.*

**Figure 8** shows the trend of Nigeria's remittance inflows. From US\$2,262.30million in 2004, the total stock of Nigeria's remittances rose to 19992.30 million in 2009 representing a percentage increase of 883.72 in five years. **Figure 9** breaks down the annual growth rate of remittance inflow to Nigeria.

Notwithstanding that millions of Nigerians are scattered all over the world and regularly maintained family and cultural linkages, it was in 2000 that the Nigerian government developed more than a passing interest in their potentiality as a source of FDI and national development. Yet, the Chinese, Jewish, Filipino, Indian and Mexican diasporas have over the years established themselves as catalysts for national development (Balaam and Veseth 2005:371). For instance, Israel since 1951 and India since 1991 have been raising hard currency financing from their respective diaspora through bonds and have raised between them between US\$ 35-40 billion (Ketkar and Ratha 2007:2).

International experience has shown that there are three basic aspects to the potentiality of the diaspora to contribute to FDI. The first is direct investment in terms of taking advantage of the divestment of government interest in SOEs, that is, privatisation exercise or outright establishment of businesses, the second is remittances to home countries and the third is bonds and sundry financial instruments. The recognition of the relevance of the diaspora to nation-building led to certain government policies that put the necessary machinery in motion to address what Okele, Medrano and Cordahi (2008:8) identified as

challenges to attracting diasporas-specific private sector investments. These challenges included: countries' weak institutional link with their diaspora; the diaspora investors' lack of access to finance in both host origin countries and absence of information on investment opportunities.

The area that Nigerian diaspora has demonstrated consistency is in sending remittances: As has already been noted, there has been progressive increment in the volume of remittances sent by the Nigerian diaspora. There is a thin line, indeed an interconnection, between remittances and investments by the diaspora. In other words, there is no clearly defined dichotomy between remittances and FDI as remittances often fulfilled the demands for investments. Therefore, the calculation of the contributions of the Nigerian diaspora to its FDI stock must necessarily include remittances. This is so because remittance inflows have been deployed to all manner of uses ranging from family up-keep to community development and economic investments (Englama 2007: 12; Nwajiuba 2005:11).

Even though Nigerians in the diaspora have been mobilised under the auspices of Nigerian National Volunteer Services (NNVS) and Nigerians in the Diaspora Organization (NIDO), these organization have not been solidly entrenched as a platform to systematically organise the attraction of FDI. Efforts at sending remittances or investing in Nigerian economy have been on personal scale. Nigerians in the diaspora make sole or joint efforts outside the umbrella of these organisations. The limited success in organising the Nigerian diaspora is attributable to three factors: one, the relative newness of these organisations and their lack of capacity to mobilise the Nigerian diaspora; two, the informality that characterises the Nigerian economic environment; and three, the levity with which data gathering and storage is treated. There is no specific knowledge in government circles about the exact number and the geopolitical distribution of Nigerians in the diaspora to facilitate effective mobilisation. The lack of precise data in Nigeria has made the collation of data by government agencies, especially the NIPC saddled with the responsibilities of encouraging, promoting and coordinating investments in Nigeria, a Herculean task. The NIPC is a one-stop agency empowered to act as the coordinating and approving centre for the establishment of businesses with foreign involvement in the country ([www.nipc.gov.ng/important/%20document/2004%20/ANNUAL%20REPORT%20OF%20THE%20NIPC.doc](http://www.nipc.gov.ng/important/%20document/2004%20/ANNUAL%20REPORT%20OF%20THE%20NIPC.doc)).

The NIPC was established as a successor to the Industrial Development Coordination Committee (IDDC) and has within its purview several tasks which include amongst others: the coordination and monitoring of all investment promotion activities; the initiation and

support of measures to enhance the investment climate in Nigeria for both Nigerian and non-Nigerian investors; promotion of investments in and outside of Nigeria through effective promotional means; the collection, collation, analysis and dissemination of information about investment opportunities and sources of investment capital, and advise on request; the availability, choice or suitability of partners in joint-venture projects and other relevant information necessary to advance and extend the frontiers of investments generally in Nigeria (NIPC Act 1995).

Many Nigerians who have braved all odds to invest in the country are not captured by the NIPC this is so because of the informality that characterises investments by diaspora Nigerians. They merely use existing channels of family and consanguineous ties to make their investments. This is despite the elaborate investment incentives packaged to stimulate investments. The NIPC has a bouquet of investment incentives to encourage and stimulate FDI in all sectors of the economy. These investment incentives include amongst others: companies income tax, pioneer status, tax relief for research and development (R&D); capital allowances, in-plant training, investment infrastructure, investment in economically disadvantaged areas, labour intensive mode of production, local value-added, reinvestment allowance and minimum local raw material utilisation. Despite the elaborate investment incentive package, many Nigerians in the diaspora still invested informally and outside these frameworks. However, several diaspora Nigerians have made investments traversing several sectors ranging from ICT, telecommunications, agro-allied businesses, pharmaceutical manufacturing, medical services, energy sector and oil and gas (Aniebonam 2006:4; Keshi 2008). Through the efforts of Nigerian diaspora, massive investments in various sectors of the Nigerian economy were made. A list of representative Nigerian diaspora-led investments has been compiled below. **Table 4.16** shows a representative compilation of diaspora-led investments in the Nigerian economy. Nigerian diaspora invested massively in estates and stocks which are not included here.

**Table 4.16: Representative Diaspora-led Investments**

S/N	Company	Key Personnel	Sector
1	Afrihub ICT Capacity Building sited in Nigerian Universities such as University of Nigeria, Nsukka and Enugu Campuses; Nnamdi Azikiwe University, Awka and so on.	Prof. Manny Aniebonam	ICT
2	American Hospital Centre, Abuja	Dr Ifeanyi Obiakor	Health
3	The NetPost Cyber Centre Project, over 30 Centres	Prof. Raymond Akwule	ICT
4	The Port Harcourt Specialist Hospital Centre, Port Harcourt	Dr Charles Okorie	Health
5	Rainbownet Telecommunications, SouthEast	Mrs Chinero Nwaigwe	Telecommunication
6	The DubCom Cyber Centres, Aba/Umuahia	Mr Dan Eke	ICT
7	The Breej Pharmaceutical Special Bump Products, Lagos	Dr Alloy Anaebonam	Health
8	HoneyDrop Food Processing Project	Dr. Jide Adejide	Agro-allied/Manufacturing
9	Geometric Power Ltd	Prof. Barth Nnaji	Energy
10	Avo Health Ltd	Dr Iheadi Onwukwe	Health
11	Transnational Corporation of Nigeria (Transcorp) (The diaspora was instrumental in setting up this corporation)	Tom Isegholi and Nicholas Okoye (formerly with Merrill Lynch & Co. Inc. New York	Energy, Hospitality and Entertainment, Telecommunication, etc

Sources: *Aniebonam 2006:4; Keshi 2008; Okele, Medrano and Cordahi 2008:40.*

According to NIPC (2006:62), between 2004 and 2006, the NIPC registered a total of 178 new foreign investments in Nigeria. A breakdown shows that while 2004 recorded 63 new firms, 2005 had 41 firms. The number however appreciated to 74 in 2006 representing 17.5 percent and 80.55 percent increase over 2004 and 2005 registrations respectively (see **Table 4.17**). These investments generated, in monetary terms, US\$424.12 million worth of FDI inflows in addition to 17,090 jobs in the Nigerian economy. The manufacturing sector generated the most jobs. Out of 10,958 jobs in 2005, it accounted for 6,749. Similarly, it created 1,866 jobs out of a total 6,132 jobs generated in 2006.

**Table 4.17: NIPC Business Registration/Business Permits by Sectors**

Investment Sector	No. of Investment			Employment Generation	
	2004	2005	2006	2005	2006
Services	19	14	18	930	1380
Manufacturing	18	12	16	6749	1866
Transport	3	4	6	383	120
Agro/Agro-allied	7	04	3	624	220
Construction/Engineering	4	2	4	1400	821
Communications	5	2	6	200	56
Oil and Gas	5	2	11	22	616
Chemicals/Petrochemicals	3	1	3	650	235
Infrastructure	-	-	-	-	-
Solid Minerals	-	-	3	-	638
Tourism	-	-	2	-	108
Power	-	-	2	-	72
<b>Total</b>	<b>63</b>	<b>41</b>	<b>74</b>	<b>10,958</b>	<b>6,132</b>

Source: NIPC 2006:63.

Apart from economic diplomacy embarked upon by the Obasanjo regime (1999-2007), there were conscious efforts, under the auspices of NEEDS, towards domestic economic reforms. Nigeria's economic reforms lay the foundation for the processes that underpinned the provision of socio-economic infrastructures germane to attracting and retaining, as well as imbuing the economic system with the necessary verve for the influx of FDIs. The role of the Nigerian diaspora in investment is enormous: they utilise two fronts – remittances and direct investment.

It is estimated by the CBN that as much 25 percent of remitted funds are channelled to investment with the rest deployed to sustaining recipient families and developing communities (Okele, Medrano and Cordahi 2008:40). Since Nigeria's political reforms that enthroned democratic governance, with attendant socio-economic reforms, there have been evidences of diaspora interest, and indeed active investment, in key sectors of the Nigerian economy. Although the various data on FDI both from the CBN and the NIPC do not have specific breakdown about the exact percentage of diasporic FDI, the increasing influence of diaspora investment as a percentage of FDI is inferable from the burgeoning remittance pool as well as the general appreciation of the FDI stock. It is important to note that most diaspora investments are outside the sphere of official data since they invested either personally or by proxy through relations, investment agencies or financial institutions. Most Nigerian banks set up a plethora of products to harness diaspora resources for investment in Nigerian equities listed locally and globally as well as liquid government and corporate bonds, trusts and mutual funds. Such banks as Bank PHB, United Bank for Africa (UBA), Oceanic Bank, Fidelity Bank, Diamond Bank and a host of other Microfinance Banks introduced specially tailored products and dollar-denominated accounts and investment advice for diaspora customers. Despite the generally small sums of money sent in each transaction tranche, the consistency of remittances has kindled the interests of Microfinance Banks creating possibilities of remittances serving as collateral for small business start-up capital for individuals thus expanding the horizons of FDI (Okele, Medrano and Cordahi 2008:14).

The Nigerian diaspora has since its crystallisation into NNVS and NIDO been mobilising Nigerians for nation-building especially in the areas of attracting FDI and generally investing in the Nigerian economy. since 2004, these organisations have been organising annual Nigerian Diaspora Day (NDD) with the sole objective of fostering and maintaining linkages Nigeria and its diaspora and among Nigerians in the diaspora. There has been an incremental and gradual awareness as demonstrated by the attendance of over 600 delegates from 23 countries in the July 2008 edition of the NDD in Abuja (Okele, Medrano

and Cordahi 2008:14). As part of their confidence-building strategies, NIDO (Europe) initiated and sponsored a US\$200million open-ended Nigerian Diaspora Investment Fund (NDIF). The Nigerian government also set up the National Resources Fund (NRF) with N80 billion. The idea behind the fund was to boost FDI by providing an easy access to any Nigerian citizen interested in participating in the country's industrialisation but lacks the funds to do so. The fund is principally a resource base to encourage the Nigerian diaspora as well as stimulate confidence in the economy. The ever-increasing volume of remittances with between 17 and 25 percent deployed to economic investments demonstrates that the Nigerian diaspora has become a catalyst to attracting FDI. The positive disposition of the Nigerian diaspora towards investing in Nigeria as well as the various reforms aimed at strengthening the economy's capacity have contributed in expanding the frontiers of FDI inflow to Nigeria as exemplified by positive postings in Nigeria's FDI stocks.

#### **4.4: BRAIN DRAIN AND THE QUEST FOR TECHNOLOGY TRANSFER IN NIGERIA**

There is a consensus among scholars that technology (its development, acquisition and application) underpins the trajectory of development, indeed, it conditions the perception and classification of countries as it is the epicentre of enhanced productivity and economic growth. Technology incorporates both the totality of man's know-how and the products that emanate from the application of this know-how. Technology is knowledge applied to the production process. The relevance of technology in the modern world capitalist system is its utilitarian value in terms of its deployment of associated knowledge to the production of goods and services (Balaam and Veseth 2005:220). What differentiates countries is the quality of their knowledge and the products that emanate from their storehouse of know-how and their overall effect on rolling back the limitation of nature. Igwe (2002:439) contends that there is rudimentary technology in every society. That is, every society or state did develop some form of technology to cater for its needs both in the ancient and modern times but the level and sophistication of technological know-how determine societies' prosperity and power.

Notwithstanding the argument of the origin of scientific inventions and attendant technological advancement, the major feature of technology is its non-static nature and

seemingly perennial trajectory toward improvement. Such search for improvement has translated into the invention and deployment of advanced, sophisticated and complex technologies with an attendant outward shift of the production possibilities frontiers. As Cypher and Dietz (1997:42) have observed, “technology progress reduces costs, increases productive efficiency, conserves society’s (and the world’s) resources, and establishes the capacity for a higher standard of living for greater numbers of persons”. Often, the acquisition of the new technologies is a product of sustained research and development that have cost component of in terms resources and time. Technologies confer advantages on both the firm and country that developed it. For one, it elevates such a country to a position of strength in the comity of states as it broadens its national power. It is the advanced technologies of the developed countries that distinguish and confer power on them. Similarly, it is the lack of sophisticated technologies that underpins the classification of certain states as belonging to the Third World. As Biereenu-Nnabugwu (2005:46-47) opines, technology is a key factor in the contemporary calculation of national power since states deploy technology in their interaction with other nations both for ascendancy and balance of power. Secondly, technologies ensure and consolidate development. All the indices of development, be it the economy, quality of life, socio-political organisation, military power and so on are anchored on advances in technological acquisition. Thirdly, technology bestows monopolistic advantages on firms and countries with the attendant high level profits that set them apart from other firms and countries. The primacy of technology in the ensemble of indices of power and development led Ogbonnaya Onu to assert that “science and technology knowledge have become so important that today, they have replaced capital as societies’ most important resource. This is true whether in an industrial or post- industrial society” (cited in Biereenu-Nnabugwu 2005:43). No doubt, science and technological knowledge constitutes a very important driving force in contemporary development. But rather than replace capital, technological knowledge actually complements it in a symbiotic, cyclical manner: capital creates science and technological knowledge through research and development; this knowledge is put into the production process which create further capital.

Dichotomisation in the global capitalist system is dictated by the technological capacity of countries. The first and second worlds are technologically advanced with ideology as the iron curtain demarcating them. According to Igwe (2002:445) the first world consists of western Europe, the US and Canada, Australia, New Zealand and Japan while the second world was supposed to be made up of the former Soviet Union and East European states which were socialist, developed and somewhat pseudo-imperialistic like the West in

terms of global ambitions. Instructively, the indices that place them at the commanding height of the modern world system such as higher-level capitalist development, military power and high standard of living are motorised by their diverse technological attainment. The Third world which comprise Africa, Asia and Latin American continents are generally characterised by negative indices manifesting in underdevelopment, fragile economies, political and economic instability, widespread poverty and very low standard of living. Essentially, the Third World countries possess very low technological base which not only places them at the fringes of the modern world system but also make them dependent on the sophisticated technological achievements of the first and second worlds. It was the desire to bridge the great gulf created by extreme concentration of technological achievements in the West that underpinned the call for technology transfer. This was especially so since major schools of economic thought identified technical progress as the primary source of economic growth in industrial countries (Ocampo and Martin 2003:113).

There are contentions about both the desirability and possibility of technology transfer as a mechanism of achieving industrial development in the Third World. Igwe (2002:439) argues that certain objective and subjective conditions underpin technological development and that it is essential that technology “must have an indigenous base, appropriate to the direct and immediate needs of people and propelled by a free political atmosphere and patriotic leadership”. This suggestion is a recipe for stagnation if not retrogression into the deeper recesses of the periphery. Again, technology is not in a steady-state but is evolutionary: that is, technological development is incremental and as such undermines the argument that technology should have indigenous base. Such an argument is an inadvertent endorsement of the developmental trajectory of the modernisation theory and its stage of development. This thinking seemed to have motorised the ISI and EOI in the Third World including Nigeria with its abysmal failure to enthrone real technological development. ISI and EOI adopted the technology transfer rhetoric of the genre that gave primacy to the purchase of simple technologies that established simple assembly and processing plants.

Technologies that tend to address narrow or local needs have no utilitarian value on the turf of contemporary globalised world. Advances in technology acquisition are no longer for the purpose of addressing domestic or local issues but for possible active participation in the production domain. This, therefore, requires adaptation and value-added modification. Igwe (2002:439) has argued that “technology can be consciously copied and improved upon through a careful study of the form, the careful analysis of its internal organization or structure, and their scrupulous reconstitution or synthesis”.

But technology transfer is not that simple. Almost all firms and countries are secretive about their technologies and jealously guard against their replication or adaptation. In contemporary modern world system, there are restrictions and prohibitive prices for technology transfer. As Ocampo and Martins (2003:13) opine, “technology transfers are subject to the payment of innovation rents, which are increasingly protected by the universalisation of strict regulations concerning intellectual property rights.” The payment by Third World for technology transfer has been enormous as demonstrated by ISI and EOI. Oftentimes, the technologies transferred are those whose relevance is at its twilight or those that do not allow the developing countries within the precinct of the most dynamic areas of activity.

One of the central problematiques in the search for Third World development has been the technology transfer dilemma. This dilemma is exemplified by the selectivity of the West in the transfer of technology. This should be expected considering that unregulated transfer of technology by any country or bloc is akin to committing economic suicide. Therefore the West determines what technology to transfer and when and how thus leading to relatively slow and irregular spread of technical progress from countries of the West to the rest of the world (Ocampo and Martin 2003:114). Technology transfer constitutes a veritable mechanism through which the technological progress recorded in the West could trickle down to developing countries. It implies “a continuous process that involves planning, decision-making about technological options and choice of the most appropriate technology in the light of local characteristics and available resources, and the utilisation and development of this technology with the aim of achieving particular goals and objectives at some time in the future“(Cohen 2004:218). Technology transfer does not happen in isolation: It is a conscious policy of government and firms. In other words, both firms and government spearhead technology transfer of various types and varieties for various reasons. Essentially, technology transfer involves two main processes: one, physical movement of technical element across national boundaries for production activities; and two, the actual implantation of the technology in the host country (Adeniki 2004)

The Nigerian state has, since independence, favoured technology transfer through the FDI. Interestingly, the FDI inflow in Nigeria is market-seeking; that is, these investments seek to serve the domestic markets. What this mean is that technologies transferred are limited in their utilitarian value as they are not adaptable to produce for the international market. Hence, Nigeria’s exports comprise mainly oil and raw materials.

The core argument of the neoliberal theoretical framework which underpinned the economic reforms in developing countries is the centrality of FDI in technology transfer. It contends that MNCs are agents of technology transfer through FDI. FDI is typically conceptualised as a gap-filling strategy that augments domestically available supplies of saving, foreign exchange, government revenue, technology and managerial resources for the purpose of achieving development. Kinoshita (1998:2); Torlak (2004:5-6) have identified four channels through which FDI stimulate technology transfer as demonstration or contagion-imitation (the imitation of the operational modalities of foreign affiliate by the local firm and the adoption and adaptation of their technologies); competition (the entry of foreign firms and the stimulation of intense competition that ultimately lead to more efficient utilisation of existing and new technologies and resources); training (the training of local workers and the broadening of their knowledge base on existing and new technologies) and backward forward linkages (collaboration with local firms). Yauri (2006:40) contends that there is positive correlation between FDI and technology transfer as FDI often comes with the advantage of technology. The argument of the anti-FDI School is that it leads to transfer of economic control and wealth to external powers which not only could undermine independent domestic development but spawns marginalisation of the FDI hosts. In other words, technologies purported to have been transferred only strengthens the peripherality of the Third World countries in the global capitalist system. The successes recorded in Southeast Asian countries which is attributable to FDI as a result of economic reforms modified perception of the link between FDI and technology transfer.

But truth is that FDI is not the only mechanism through which technology transfer could be effected. Ikiara (2003:8) has identified other channels as including:

- i. importation of machinery and intermediate inputs (or trade in general) international movement of labour, for example reverse brain drain and movement of consultants; “arms length” transaction or technology licensing;
- ii. govt efforts such as education provision and investment on high-tech projects;
- iii. contract manufacturing for developed country markets;
- iv. Expert-guided tour of factories apprenticeship;
- v. illegitimate means such as industrial espionage.

It is also known that ideological and strategic reasons had, in the heydays of the cold war, stimulated technology transfer for the purpose of containing the perceived expansionary policies of adverseness. But the MNCs are the main agency of technology transfer either

through internalised method (FDI through affiliates) or externalised method (joint ventures, franchising, capital goods sale, licences, technical assistance, international subcontracting) (Ikiara 2003:8; Aremu 2005:42).

Nigeria, as already noted, has always sought to participate in the global investment regime. But the major challenge that faced successive regimes was the identification and application of effective mix of policy measures that would roll back disincentives to foreign investment (Aremu 2005:11). This challenge was as result of the need to balance the need for FDI and technology acquisition and the country's economic sovereignty. The second National Development Plan (1970-74) which was motorised by economic nationalism outlined the direction of government policy as "progressive elimination of foreign dominance in the national economy, not merely in terms of nominal financial ownership, but really in terms of the level of managerial and technological control "(cited in Aremu 2005:116). Thus the Industrial Inspectorate Act of 1970 was strengthened with the National Office of Industrial Property (NOIP) Act 90 of 1979. NOIP was vested with wide-ranging powers which included the protection of the Nigerian economy from being a dumping ground for obsolete and undesirable technologies and the stimulation of free flow of technology into preferential or priority areas of the economy; improvement of the adaptation and absorption of imported technology into Nigeria and the development of indigenous technology capabilities. In assessing NOIP whose nomenclature changed to National Office for Technology Acquisition and Promotion (NOTAP) in 1979, Aremu (2003:124) avers that "it is difficult to point out how much technology, in its real meaning of *core technology* had been negotiated and attracted".

The whole concept of technology transfer is built on the overriding motive of profit. Every party to technology transfer is motivated by what is in it for it. MNCs engage in technology transfer simply because it could enhance their productivity and thus more profit. Ikiara (2003:9) avers that investors including MNCs can prevent technology transfer if it is not consistent with their profit-maximizing strategy and the cost of preventing it is low. An important point in the whole question of technology transfer is that the availability of a crop of competent personnel to man the entire processes is an irreducible minimum requirement. Even though Nigeria's first Development Plan (1962-68) recognised this when it anchored its technological and industrial development on foreign experts. Subsequent Development Plans sought to anchor development on Nigerians. This led to the liberalisation of education with the goal to educate Nigerians to fill the gap. Indeed, the Nigerian state provided the framework of universal primary education, unity school and tuition-free, broad-based tertiary

education. The result of these efforts is the massive production of all grades of manpower for national development. The economic crisis of the 1980s and introduction of SAP under the auspices of IMF deepened the contradictions in the Nigerian economy leading to mass emigration. The mass emigration of highly skilled Nigerians created a big hole in the manpower pool which was necessary to consolidate technology transfer. The relevance of human capital in technology transfer is exemplified by the outsourcing of Nigeria's technological needs as demonstrated by the building and commissioning of Nigeria's space projects through the Russians.

On the one hand, the thrust of the politics surrounding technology transfer is encapsulated in the seeming mutually exclusive and conflictual quest by the developing countries to better their technological base in the milieu of inequalities, exploitation and underdevelopment/development crisis that characterise the modern world capitalist system. And on the other hand, the quest by the developed countries to regulate the transfer of technology in such terms and conditions dictated by them. The politics of technology transfer epitomises the grim battle between the developed and developing countries. And the battle centres on the liberalisation or restriction to the transfer of technology with both sides favouring contradictory and antagonistic positions. As Magic (2003:1) captures it,

Developed countries believe it is in their interest to protect the valuable technologies and intellectual property of their transnational companies (TNC) from being used or worse yet, copied, without compensation. In their view, underdeveloped and developing countries engage in exactly those practices. Thus, developed countries continue to push for a commitment from developing countries towards stronger protection of intellectual property.

Superior technological infrastructure constitutes a major parameter that distinguishes states within the modern world capitalist system. The ascendancy of the industrialised countries inhered from their control of modern technology. The history of the control of technology in the modern world dates back to the era of industrial revolution in the late 18<sup>th</sup> century in Britain. Industrial revolution depicts the era of incipient industrialisation characterised by the discovery and institutionalisation of new and efficient methods of engaging in productive activities. Industrial revolution was a watershed in the sense that it spawned the trajectory of British economy from dependence on agricultural goods to manufactured goods through the instrumentality of new industries that were set up for such

purposes. British technological advancement in those early days of industrial revolution bestowed it with superiority but the spread of this revolution to other European countries not only narrowed the technological gap but in some cases stripped Britain of its superiority.

It may be inferred from the early experiences of Britain that contemporary restrictions to the diffusion of technological knowledge is to maintain the technological gap necessary for the continued ascendancy of the developed countries in the global arena. Ake (1981:28) notes that the spread of industrial revolution to other European countries had far-reaching effect on British economy. British superiority was overthrown as the technological gap between them and other European countries was narrowed. Again, by further developing and applying the new advances in science and technology to the benefit of industrial development, the mass appeal surrounding British goods was deflated. The *laissez faire* associated with technological innovations and exchanges in those early days led to proliferation and thus created surpluses in production and the need for new markets which underpinned the “scramble for Africa”.

Following discrimination against British goods by America, France, Germany, Russia and Austro-Hungary, Britain became anxious to promote free trade. The anxiety of Britain to promote free trade was equally matched by the determination of other European countries to protect their own infant industries. Ake (1981:29) records that:

Against such threats Britain became very anxious to promote free trade, to find new markets and new outlets for investment, but most importantly she became very anxious to defend her empire and the commercial privileges she enjoyed by her connection with them. At the same time, Britain’s competitors were also in an aggressive and expansionist mood. ...When propaganda gave way to action, Africa found itself the focal point for the action; the scramble for Africa began.

Africa is a latecomer to technology acquisition and deployment. Indeed, Africa is a victim of technology. Imperialism, colonialism and neo-colonialism through which Africa, including Nigeria, has suffered humiliation are the products of the superior technological endowments of Europe and the US. Also, Africa’s continued underdevelopment is made possible by its lack of technological capability. The *Global Economic Prospects* (2008:7) captures it with a note of pessimism thus:

The bulk of technological progress in developing countries has been achieved through the absorption and adaptation of pre-existing and new-to-the-market or new-to-the-firm

technologies, rather than the invention of entirely new technologies. Given the still wide technology gap, this is likely to remain the case for the vast majority of developing countries.

Since the dawn of independence in the 1960s, Africa, in league with other Third world countries has been canvassing for the reconfiguration of the global capitalist system for a greater technologically-driven role for them. The crux of the agitation by Third World countries was the reordering of the international economic system to “make it more equitable through commodity agreements, common fund, special preferences to less developed countries for their manufactures and easier access to them for technology and capital (Echezona 1998:236).

The new International Economic Order (NIEO) (as the agitation was termed) principally sought the liberalisation of development in the face of the failure of the policy of agricultural production expansion and import substitution industrialization to enthrone “viable self-sustaining socio-economic systems” or the elimination of the constraints on Africa’s external trade (Ake 1981:162). The NIEO has not materialised because the diffusion of technology which would have spearheaded it and brought about a restructuring of the international trade was not allowed to happen by the West. So, the Third World still occupies the fringes of the international economic system.

The failure of international coalition approach to change the circumstances of the Third World led to individual efforts. Countries began to adopt stylised strategies to industrialise their national economies since the modernisation of economies is dependent on industrialisation. The imperativeness of the quest for modernisation is underscored by the fact that:

In the present international situation, the major manufacturing countries have a much stronger bargaining power than the countries that export mainly raw materials. Whereas the industrial exporters do not depend mainly on the raw material exporters for markets for their goods, the raw material exporters depend almost totally on the industrial countries for markets for their exports. (Toyo 2002:7).

In other words, any country that desires to possess a strong bargaining power must industrialise. But the achievement of industrialisation within an economy is not purely a product of desire or wish but a product of technology acquisition, know-how and finance capital. Import substitution and export-oriented industrialisation strategies represented an attempt by the Third World to attract the necessary technologies for the expansion of

domestic economies. Although export-oriented industrialisation (EOI) differed in two important respects from import-substitution industrialisation (ISI) namely: its purview extended beyond the domestic market; and it required less imported intermediate inputs, both are preoccupied with the whole question of industrialisation, self reliance, a better balance of trade, savings in foreign exchange and the diversification of the economy (Ake 1981:146-149).

The type of technology transfer that both the ISI and EOI achieved was not the type that could motorise independent industrialisation necessary to make a mark in the global setting. As a matter of fact they deepened the foreign exchange dilemma of developing countries including Nigeria as more and more foreign exchange was deployed to importing inputs germane to their sustenance (Ake 1981:147, Ajayi 2007:147). Until 1960, issues pertaining to technology including invention, innovation and deployment to productive uses fell within the domain of national policy concerns. But issues of technology have since transcended national boundaries and now occupy the international stage. Taylor and Smith (2007:28) identify three reasons as undergirding this development namely: the cruciality of technology to economic growth and development; the impact of technological gap and the cost of technology transfer between the developed and developing countries.

As has already been noted, at the core of the inequality in the international economic systems is where a country stands technologically. Countries that are categorised either as advanced, developing or underdeveloped countries are those whose technological base depict modernity or at the threshold of modernity or relatively stagnated at the infant and rudimentary stage. But the increasing creativity of some developing countries in initiating and adapting the technologies of the West led to a rethinking of the whole question of technology diffusion. Tandon (2000:59) describes this era of new changes in the perception of the developed countries as “the era of hard economics, much like the era of mercantilism at the dawn of capitalism”.

The types of technology necessary for the advancement of industrialisation are not products of chance but evolved through a painstaking process of research and development. Often, states spend so much money in supporting research and development and therefore guard their outcome jealously. This is so because it is the intellectual input in researches that produce technologies. The need for the recognition of the knowledge associated with technologies spawned the whole issue of Intellectual Property Rights (IPRs). In other words, IPRs connote governmental legal backing and protection accorded creative intellectual efforts that manifest in new technologies, products and services (Maskus 2000:27; Balaam and

Veseth 2005:22). IPRs have found building blocks in patents, trademarks, copyrights and so on. The Paris Convention of 1883 and the Berne Convention of 1886 constituted the earliest international efforts at protecting intellectual property rights. While the Paris Convention preoccupied itself with evolving protectionist framework for industrial property including patents, utility models, trademark and industrial designs, the Berne Convention pursued international copyright protection for literary, scientific and artistic works (Magic 2003:2).

The setting up of constitutional framework under the auspices of the United Nations such as the World Intellectual Property Organization (WIPO) in 1967 gave the issues surrounding intellectual property rights essence and direction. This organisation set the parameters that were later harnessed into, and formed the core of the Trade-Related Aspects of Intellectual Property Rights (TRIPs) agreement that was adopted at the Uruguay round of the World Trade Organisation (WTO). The developed countries have used the instrument of IPRs to ensure their dominance as well as delineate the boundaries of technology diffusion. IPRs have enabled them to determine the direction of technological cooperation and the nature of monopolisation of knowledge power products. As Baalam and Veseth (2005:222) opine,

With the rapid pace of technological change, new products and new processes are especially valuable to individuals, business firms and nations because of the wealth and power that derive from them. To gain the maximum advantage, however, one needs to control access to new knowledge and technology - to keep others from using the products of research and innovation without paying in full for the right.

IPRs short-circuit the possibility of developing countries “copycatting” existing technologies as a form of technology transfer. As Pugatch (2004:16) observes, “patents, copyrights, trademarks and other forms of Intellectual Property Rights (IPRs) create a temporary monopoly on varying types of knowledge, allowing their owners to restrict, and even prevent, others from using the knowledge”. And that is why the developed countries mount serious pressure on the developing countries to ensure a strict implementation of the provisions of the IPRs.

What the international restrictions embedded in TRIPs have been able to do is to ensure that Africa and other developing countries do not cross the technology Rubicon and, thus, become technologically-advanced. The IPRs mechanisms such as patents, copyrights and so on have been used as inhibitors to technology transfer as they create two scenarios:

deliberate overpricing of patents to beneficial technology which undermine the cost-benefit advantage of domestic production and the remote-controlling of the nature of technologies to be transferred to the developing countries. Thus, these patents become tools in the hand of the industrialised countries and they use it to exert control over the direction of economic growth in the developing countries.

The argument has been canvassed that the domestication of international regime of IPRs as well as the strengthening of the domestic legal framework would enhance technology transfer through FDI. In other words, the influx of new technologies necessary for development responds to domestic erection of legal frameworks aimed at protecting such new technologies. But the truth is that the international regime of IPRs is principally and exclusively designed with the best interest of the developed countries as its central objective. Whatever benefits that trickle down to the developing countries are marginal and are merely incidental to these technological transfers. As Magic (2003:4) has argued,

In principle, TNC [transnational corporation] will engage in such investing when it will provide an advantage not found in the home market of the TNC. However, as TNC move more production to developing nations where labor and infrastructure are cheap, they need stronger patent rights to ensure that their technology and knowledge do not leak into other companies in those countries.

The politics associated with politics technology transfer is part of the broader politics of development that characterise North-South relations. TRIPs represent a gridlock, a veritable checkmate on the diffusion of technology that could help the developing countries achieve economic independence. TRIPs incorporate minimum standards of protection for copyright, trademarks, patents, trade secrets and contracts and provide a twenty-year protection window for all inventions, products and processes in just about every area of technology including pharmaceutical, agricultural and biogenetical resources (Magic 2003:2, Tandon 2000:65-66).

So what TRIPs and IPRs have successfully done to the prospects of technology transfer to Africa was its blockage. Therefore contemporaneously,

It is thus much harder now than during the 1950 to 1990 period for Third World countries to develop on the basis of borrowed (or copied) technology. This was the time when Japan and many South-East Asian countries industrialised on the basis of this “borrowed” technology. Africa, being the last in the march

towards industrialisation, is thus even more disadvantaged than the Asian NICs that were able to secure some benefits for themselves during a more lax intellectual property regime (Tandon 2000:65).

A broader implication of IPRs to the African continent is that millions of its professionals that were sucked into the brain drain syndrome would be lost to it. The pro-migration scholars in their defence of brain drain introduced the concepts of brain gain and brain circulation by which they contended that host countries generally benefitted from the knowledge acquired by migrants. It is true as Barton (2007:7) argues that “the skilled person [African] contributes more to the global economy and society when he or she can work with the best facilities and complementary resources”, but it is not true that access to the product of such endeavour percolates freely to every segment of the world system. This is so because the provisions of TRIPs are so painstakingly drawn that they outlaw such possibilities.

The rights to patents, trade secrets, invention and copyrights reside with the companies or countries that employed the African migrant scientist, technologist, engineer, pharmacist or biogenetics. Article 34 of the Annex in the Uruguay agreement dealing with TRIPs outlawed “reverse engineering” which was the strategy used by such South-East Asian countries like Taiwan and South-Korea to domesticate western technology. Reverse engineering refers to disassembling, reassembling and manipulation of technological principles of a device, machinery or system through the analysis of its structure, function and operation with a view to replicating same for the purpose for which the one being copied was built (Tandon 2000:65; <http://en.wikipedia-org/wiki/reverse-engineering>).

But despite the predilection of the developed countries to jealously guard the secrets of their technology, a more pertinent issue in the global politics of technology transfer is the preparedness of developing countries to absorb relevant technologies. The economic state of developing countries is vital in either inducing or repelling technology transfer. Whether one is looking at market channels of technology transfer (trade in goods and services, FDI, licensing and joint ventures) or non-market channels (imitation, temporary migration, departure of employees), technology transfer is my only possible if the basic infrastructures are in place in the developing countries. As Global Economic Prospects (2008:4) opines, “the level of the technological achievement observed in a country is positively correlated with income levels”. The income criterion is misleading because income distribution in the global capitalist system is a product of a country’s position. On the contrary, it is not income the powers technological development or expands the absorptive capacity of African economies

but their productive forces. Technologies that do not have counterpart domestic infrastructure or mechanisms for their adoption and adaptation within the domestic arena, are in the main, irrelevant to that economy and cannot be transferred no matter how pivotal they are in engendering development.

The major problem that confronts Africa is how to change its reputation as a new consumer of technologies to a net inventor. But the first strategy would be to encourage a shift from public-sector domination of research and development (R&D). Barton (2007:21) observes that “in developing nations, even the most scientifically sophisticated ones, there is generally relatively less private-sector research, as compared to public-sector research”. What this implies is that the private sector in the developing countries especially Africa has been moonlighting contentedly under the canopy of imported technologies and has not been pushful enough to spearhead R&D necessary for either innovation or invention of technologies. There is no technological invention that is associated with Africa and yet thousands of African (especially Nigerian) scientists and engineers hold sway in the laboratories of major TNCs and research institutes in the developed countries. There are no intellectual property rights that are greater than the brain drain that Africa including Nigeria suffers and from which the capacity of the West is buoyed up. Global Economic Prospects (2008:123) recognises that notwithstanding the possibility that emigrants from the developing countries might not be maximally engaged in their home countries due to limited opportunities, yet their emigration poses constraints to domestic innovation and technology adoption. It is imperative that TRIPs should incorporate the compensatory package for African brains that populate the West and help in driving its technological ascendancy.

Nigeria’s preoccupation with technology transfer coincided with its post-independence desire for industrialisation. The realisation of the centrality of technology to motorise development and the reality of Nigeria’s low technological status led to the quest for technology transfer. The Industrial Development (Income Tax Relief), Act, 1958 was the legal tool evolved by the Nigerian state to protect and soften the ground for foreign investors (Aremu 2003:50). The Industrial Development Act of 1958 provided such reliefs “pioneer status” which accorded tax holiday privileges to companies and accelerated depreciation rate in capital assets.

There are two phases in the institutional responses to the challenges of technology transfer. The first phase was in line with the laissez-faire thrust of the Nigerian economy and spanned 1958 – 1981. This era was characterised by massive importation of capital goods and services. The second phase involved active state involvement and spanned 1981 – the

present. This phase was heralded by a state policy encapsulated in the 1976/77 budget which was anchored on the belief that “the modernisation of our [Nigeria’s] economy would involve a substantial transfer of technology ... through mutual partnership with foreign private and public enterprise “(cited in Biereenu-Nnabugwu 2005:55).

Nigeria’s quest for technological development through the mechanism of technology transfer was supported with both legal and institutional frameworks. During the colonial era, the promotion of industrial development was pursued under the auspices of two agencies of government: the Nigeria Local Development Board and the Dept of Commerce and Industry whose functions consisted in the promotion of industrial development. Ikpeze, Soludo and Elekwa (2004) have argued that the lack of progress in industrialisation and attendant technology transfer during colonial era was as a result of overriding motive of Britain in accordance with the logic of capitalist exploitation:

Britain’s national interest lay not in the economic or industrial development of Nigeria but in the development of basic infrastructure (rail and road networks) to facilitate the evacuation of primary products and the distribution in Nigeria of manufactured goods imported from the metropolitan economy (Ikpeze, Soludo and Elekwa 2004).

But the National Development Plans that were initiated and implemented in the periods following independence sought to develop Nigeria’s technological base through the instrumentality of FDI. The first National Development Plan (1962-1968) relied, and rightly too, on foreign technologies to power the developmental quest of the country. This was inevitable for three reasons: Nigeria had no indigenous technological base upon which to anchor further technological development; it lacked a crop of technical personnel to man its quest for technological advancement and Nigeria believed that the path that would actualise its industrial and technological expectation was the path of core industrial projects (CIPs) notably, iron and steel, paper, fertilizer, petrochemicals, oil refineries, machine tools, liquefied natural gas, aluminium smelting and others. The capital outlay to operate these CIPs, was enormous and clearly outside the financial muscles of indigenous private investors. As a result of government’s categorisation of CIPs as the backbone of modern states it acquired substantial stakes in the companies that were formed to operate in these sectors.

In 1970, through the instrumentality of the Industrial Inspectorate Act, the Nigerian government created the Industrial Inspectorate Division as an integral part of the existing Federal Ministry of Industry. It was mandated to, among other things, investigate existing,

new and proposed industrial establishments especially their capital formation as well as the actual valuation of their buildings, plants and other machinery. It was also mandated to obtain and keep detailed records of all industrial plants and equipment in the country. (Aremu 2003:54).

The negativities associated with technologies (such as inappropriateness of technologies to local needs, rising cost of imported technologies and the aggravation of dependency status of the country) led to the establishment of National Office Of Industrial Property (NOIP) through the NOIP Act of 1979. Aremu (2005:121) notes that NOIP was expected to “stimulate flows of technology into preferential or priority areas of the economy, ensure that the imported technologies were obtained on fair terms and conditions; improve the process to adapting and absorbing imported technology into Nigeria; and develop indigenous technological capabilities”. In order to strengthen the mandate of NOIP, its name and scope of operations were enlarged through Decree No. 82 of 1992, now referred to as NOTAP Act Cap 268, Laws of the Federation of Nigeria, 1994. The name thus changed to National Office for Technology Acquisition and Promotion (NOTAP). The change of name was necessitated by the need to streamline NOTAP’s core functions and functions of other government agencies especially the Office of Registry of Patents and Trademarks in the Ministry of Commerce (<http://notap.gov.ng>), Okongwu 2006:3). The mandate of NOTAP is quite broad, covering almost every aspect of technology transfer. The major functions of NOTAP include among others.

- (a) Registration of all contracts for the transfer of foreign technology to Nigerian companies;
- (b) Development of negotiating skill of Nigerians to ensure best contractual terms and conditions in any agreement for transfer of foreign technology;
- (c) Monitoring the execution of registered Technology Transfer Contracts;
- (d) Dissemination of technology information;
- (e) Collation and documentation of R&D results and inventions;
- (f) Promotion of innovation and IPR awareness among researchers and investors;
- (g) Commercialisation of useful R&D results and inventions (<http://notap.gov.ng>).

NOTAP has made tremendous impact in terms of establishing and maintaining credible data on the trajectory of technology transfer. According to Okongwu (2006:5) between 1983 and June 2006, NOTAP registered 2,400 technology transfer contracts out of over 3,000 submitted. As part of creating a link between invention and adaptation, NOTAP set up fifteen Intellectual Property Technology Transfer Offices (IPTTOs) in Nigerian

universities, Polytechnics and research institutions. The aim of this collaboration was to create a synergy between NOTAP and traditional inventing institutions and industries. IPTTOs were designed to be a platform for the development of a robust intellectual property rights portfolio through patenting, copyright, and technology licensing aimed at developing patent culture. It also concerned itself with the establishment of formal systems of incentives and rewards to researchers within the framework of partnerships (<http://www.notap.gov.ng/content/establishment-Ipttos>). NOTAP as a principal agency for technology acquisition and transfer has links with other agencies such as Nigerian Investment Promotion Commission (NIPC), National Information Technology Development Agency (NITDA), Raw Materials Research and Development Council (RMRDC), National Biotechnology Development Agency (NABDA) among others to ensure the streamlining of indigenous technological development and international acquisition, adaptation and transfer of relevant technologies for national development.

**Table 4.18: Legal Frameworks for Technology Rights**

S/N	IP	Legislation	Nodal Agency
1	Patents	Patents & Design Act 1970 (Cap 344, Laws of the Federation of Nigeria 1990)	Commercial Law Department, Trademarks, Patents and Designs Registry, of the Federal Ministry of Commerce and Industry.
2	Designs	Patents & Design Act 1970 (Cap 344, Laws of the Federation of Nigeria 1990)	
3	Trademarks	Trademark Act 1965 (Cap 436, Laws of the Federation of Nigeria 1990)	
4	Copyright	Copyright Act 1988 (Cap 68, Laws of the Federation of Nigeria 1990)	Nigerian Copyright Commission (NCC) under the supervision of the Federal Ministry of Justice
5	Geographical Indications (GI).	No Legislation. Administered as part of Trademarks under Section 43(1) of the Trademarks Act CAP 436(Certification Trademarks), Laws of the Federation of Nigeria (LFN) 1990	Commercial Law Department, Trademarks, Patents and Designs Registry, of the Federal
5	NOTAP	Act No.70 of 1979 (Cap 268 Laws of the Federation of Nigeria 1990)	

Human capital occupies a commanding position in the schema of industrialisation. It is the human capital that mobilises other factors of production. So without human capital, it is nigh impossible for the conversion of other factors of production into wealth. Human capital constitutes a major part of the vital wealth of a country. Education and training are the most important investments that give human capital its worth. It is possible to categorise human capital and attach value to it based on the quality of education and training it has received. The centrality of human capital in state development is such that no country can achieve sustainable development in the absence of relevant corps of human capital. Becker (1993:12) asserts:

Moreover, few if any countries have achieved a sustained period of economic development without having invested substantial amounts in their labor force, and most studies that have attempted quantitative assessment of contributions to growth have assigned an important role to investment in human capital.

Africa has invested enormous resources in the development of its human capital but has lost same to the developed countries. It is estimated that since 1990 about 20,000 skilled professionals leave sub-Saharan Africa each year with total estimated stock of Africans in the Diaspora as at 2006 put at 32.8 million (Plyushteva 2005: 3 IFAD 2007:8).

There is no doubt that there are accruable mutual benefits from the exodus of skilled professionals of African extraction to the developed countries. But what has pitched both opponents and supporters of migration in endless debate is the degree of dispersion of the benefits of migration to home and host countries. The Eurocentric rationalisation of migration especially the North-South migration trend centred on remittances, technology transfer and reverse-migration: that is, migration favours home countries through remittances from the diaspora (which potentially contributes in reducing poverty and providing investible funds even though at the subsistence level), reverse-migration with attendant improved skills and transfer of technology. Most of the supposed gains of emigration to the home countries are at best probabilistic, that is, there is no rational basis to believe that the home country would actually benefit from its diaspora. The fraction of skilled professionals that would ever come home is that whose skills and knowledge are in the non-essential sectors of their economies. Those in strategic sectors of the developed economies ordinarily hold citizenship rights and perceive themselves as citizens of these host countries. Their links with their home countries are mere evocative emotions that would never be strong enough to make them relocate even if the host countries would allow them and the conditions at home conducive enough. The

Nigerian-born American supercomputer icon Philip Emeagwali spoke forthrightly on the farfetchedness of reverse-migration. His view appeared representative of the existential dilemma of the emigrated skilled Africans ([http://emeagwali.com/interviews\\_/brain-drain/education-in-africa-brain-drain-problem-worldnet-africa-journal.html](http://emeagwali.com/interviews_/brain-drain/education-in-africa-brain-drain-problem-worldnet-africa-journal.html)).

It would be inconsiderate and indeed difficult for the established migrant to give up their career and the allure of potential opportunities that the developed economies offer for the uncertainties that characterise Nigeria. Considering the arbitrary manner that underpinned the emergence of the Nigerian state and the predilection to micro-loyalties based on ethnicity, there is acute absence of macro-patriotism. Therefore, the absence of such a broad-based patriotic platform was a recipe for self-considerations over and above state interests. Often the feeling of guilt which the average migrant feels is not about the loss which the state suffers on account of their emigration but about their limited contributions to the progress of their family, community and ethnic group. Emeagwali's experience mirrors it thus:

On the day I left Nigeria, I felt sad because I was leaving my family behind. I believed I would return eight years later, probably marry an Igbo girl, and then spend the rest of my life in Nigeria. But 25 years ago, I fell in love with an American girl, married her three years later and became eligible to sponsor a Green Card Visa for my 35 closest relatives, including my parents and all my siblings, nieces and nephews (Emeagwali, 2009:1).

The whole argument of brain gain is erected on the shifting sand of neoliberal idealism that is anchored on claims of reverse-migration, remittances, diaspora network that promotes the attraction of FDI, and in skills and knowledge multiplication in the home countries as a result of prospects of positive earnings abroad. Out-migration has only spawned a situation worse than “motion without movement” or “running on the spot” as far as African development is concerned. The assumption of brain gain theorists that migrants would always go back to their home countries with spill-over benefits is tenuous and has no basis in the logic of market forces. The nature of global capitalist system cannot support a sustainable wholesale grafting of skills from the developed countries as has been demonstrated my decades of brain drain. Despite examples of Mexico, China, India and Israel where there are substantial collaboration between the home countries and diaspora networks, there is no concrete evidence directly linking the developmental strides of these economies to reverse-migration. The only pointer to the contributions of migrants, to their home countries is the ever-rising volume of remittances. But as Emeagwali (2009) has pointed out,

Money alone cannot eliminate poverty in Africa, because even one million dollars is a number with no intrinsic value. ... Under the status quo, Africa would still remain poor even if we were to send all the money in the world there. ...money cannot bring electricity to our home, but engineers can. Money cannot cure sick people, doctors can.

But these African skilled professionals are domiciled in the developed countries with only tangential relevance to the host country. In a regional analysis of the root of differences in the growth of Asian economies, Hasan (2001:6-8) identified sustained human capital investment as a major determinant of the economic ascendancy of East Asian countries. In other words, these economies achieved development because they had the privilege of using the human capital they produced. Africa and indeed Nigeria on the other hand appeared to have been investing in their human resources for the benefit of the developed countries.

In a recent study, Erosa, Koreshkova and Restuccia (2007:2) affirm that human capital accumulation strongly amplifies total factor productivity (TFP) differences across countries. What this implies is that the depletion of Africa's human capital as exemplified by brain drain accentuates its underdevelopment. Since the 1980s, there have been massive policy changes aimed at increasing both the quality and quantity of migrants. Between 1990 and 2000, the number of foreign born individuals (immigrants) legally residing in OECD countries multiplied by 1.4 with a larger increase for highly skilled migrants than for low skilled migrants (Docquier and Rapoport 2007:3).

The engine of economic growth in the contemporary global system is technology. It is the differential in technology acquisition and adoption that underline the differences between developed and developing countries. And the most important drivers of technological progress are: ideas, knowledge and experience encapsulated in human beings. Berdugo, Sadik and Sussman (2005:2) posit that "since technology adoption is the main channel for growth in follower countries, and since different levels of technology account for differences in income per capita, a search for the explanation of why some countries are poor has to focus on delays in technology adoption". There are several factors that account for the delays: first is the skewed global capitalist system that makes these follower countries the enclave for the production of primary produce; the second is adjunct to the first and has to do with domestic incapacity of these countries as a result of severe contradictions in their domestic economies; and, third is the human capital flight that eroded their human capital capacity to engineer these technology options. The relevance of this last point is appropriately

recognised by Berdugo, Sadik and Sussman (2005:3) who posit that “technology adoption requires the acquisition of an *appropriate* human capital”.

Every sector of the Nigerian economy is adversely affected by the emigration of its skilled professionals especially the health, manufacturing and education sectors. The education and health sectors have suffered sustained depletion since the 1980s. For instance between 1980 and 1990 which was the peak of IMF-instigated SAP, the country lost over 10,000 academics from its tertiary institutions (Onsando 2007; Utile 2008:7). The same predicament was the lot of the health sector.

The brain drain in the health and educational sectors was given impetus by the progressive decay in the system which made it impossible for health professionals and academics to meaningfully and optimally discharge their duties. It is doubtful whether Nigerian policy makers really value the country’s investment on health and education and their associated impact on Nigeria’s economic development. As Oni (2000:4) observes “even though the Nigerian government recognises the development of science and technology as a matter of national policy the existing research centres and universities are faced with problems which affect their performance”. The combined effect of this is mass exodus of highly skilled personnel. Hernandez-Coss and Bun (2007:40) estimate that 5 million Nigerians live in the US. Other OECD countries host many more millions of highly skilled Nigerians. The depth of absorption of Nigerians in the developed countries and the emphasis on their remittances over and above their return creates a monumental dilemma to the industrialisation quest of Nigeria. Hernandez-Coss and Bun (2007:40) inform:

The United States issues approximately 6000 green cards to Nigerians each year. Each of these green card holders tends to migrate with approximately three dependants. The UK issues approximately 26000 visas annually to Nigerians. Approximately 50 percent of these Nigerians in the United States and UK do not return to Nigeria.

The various favourable immigration policies in other OECD countries have also opened the door for massive immigration of skilled professionals from the developing countries including Nigeria. Despite the argument of the new growth models that migration possesses positive attributes that engender development in the source country, the African experience is to the contrary. Onsando (2007) has observed that

To acquire the scientific knowledge and technology required for a technological regime, Africa will have to strengthen its

capacity to use wisely a mix of channels, including, copying, imitating, duplicating, intelligence gathering, resource engineering, licensing, partnering networking with the Diaspora, overseas studies, technical assistance and international and regional cooperation.

Brain drain has compounded the dependency of Africa and created severe contradictions in its political economy especially developing appropriate technologies for industrialisation. Instead of being in the forefront of technology-based industrialisation, Africa stands, plate in hand, for crumbs from its poached human capital. African stands, plate in hand for crumbs, from its poached human capital. Agrawal, Kapur and McHale (2008:1) have pointed out the limitations of the supposed gains of brain drain:

- (a) International diffusion may be slow due to the localisation of knowledge spillovers;
- (b) Rich-country innovation may not properly address the needs of poorer countries; and,
- (c) Domestic knowledge production may be necessary to create the capacity to absorb foreign technology.

But the point is that the permanence of migration as exemplified by the issuance of permanent residence permits and citizenship rights adulterates the nationalistic fervour of migrants. Other factors such as lack of policy framework to harness the diaspora, policy inconsistencies, monocultural economic base as well as retrogressive and dismal economic outlook which circumscribe economic growth discourage sustained migrant efforts at contributing to home country.

Nigeria's industrial sector does not operate to its full capacity in spite of the enormous human and material endowments of the country. Modern industrial sector generally derives its essence from the deployment of science and technological breakthroughs to the achievement of improved productivity. Ukaegbu (1991) conceives industrialisation as "the process by which inanimate energy or mechanical power replaces human energy in production". This conceptualisation is too simplistic and does not capture the whole essence of industrialisation especially its impact on the population as well as the placement of the country in the comity of countries. Industrialisation is much more complex than being the "process of replacement" of the means of converting raw materials to finished goods. Ukaegbu's (1991:1) conceptualisation is synonymous with modernisation. As a matter of fact, industrial policies and practices in Africa including Nigeria were pursued on an ad-hoc

basis and in the most uncoordinated manner that any expectation of dividend from such policy thrusts was misplaced. Industrialisation is a fundamental objective of economic development and is what differentiates countries and pigeonholes them either in core, semi-periphery or periphery of the modern world system.

Kirkpatrick, Lee and Nixson (1985:1) observe that industrialisation induces industrial development with the overall objectives “to achieve high rates of economic growth, to provide for the basic needs of the population, to create more employment opportunities, to lead to an increasingly diversified economy and to give rise to desirable social, psychological and institutional changes”. For Africa, the achievement of these conditions is critical to its integration into the global capitalist system and its eventual exit from the periphery of the modern world system. But Africa’s quest for industrialisation is constrained by several challenges. UNIDO’s Director General, Kandeh K. Yumkella, identified these challenges to include among others, “limited industrial skills and technological capabilities, weak support from institutions, inadequate financing and underdeveloped internal and regional markets (<http://www.unido.org/index.php?id=78818tx>). A key omission to the legion of hindrances to Africa’s capacity to industrialisation is the erosion of its human capital base through brain drain.

Nigeria’s quest for industrialisation has been an up-till task owing to a number of drawbacks including the absence of sustained national policy framework. As a matter of fact, industrial policies and practices were pursued on an ad-hoc basis and in the most uncoordinated manner that any expectation of dividend from such policy thrusts was misplaced. Ukaegbu (1991:1) has identified other draw backs as shortage of financial capital, lack of entrepreneurship, poor management, underdeveloped technology, inadequate socio-economic infrastructures, shortage of technical manpower and foreign domination . Even though industrialisation connotes “extensive organisation of an economy for the purpose of manufacturing”, the sustainability of the economy through manufacturing and associated productive activities depends on domestic capacity. Industrialisation is entrenched when it has a high percentage of local content in its composition.

Local content lacks in the core sectors of the Nigerian economy owing to dearth of skilled personnel. It is not as if Nigeria does not have the corps of competent and skilled personnel to kick-start and sustain its industrial drive, the point is that they have been depleted as a result of brain drain. There is no doubt that the Nigerian economy is beset with many contradictions which have combined to inhibit the achievement of not only industrialisation but also economic progress. Ebi (2004:3-4) outlines the shortcomings of the

Nigerian economy as consisting in “slow growth arising from low productivity and the uncompetitiveness of the private sector, ... infrastructure deficiencies, weak institutions, rent seeking and inconsistent macroeconomic policies”. Ikpeze, Soludo and Elekwa (2004:341) paint the scenario thus:

Nigeria’s experience with external trade and industrialization is a classic case of tragedy. Manufacturing value- added as a percentage of GDP was about five percent in 2000 (less than the proportion at independence in 1960), making Nigeria one of the 20 least industrialized countries in the world. Industrialization in Nigeria soared during the oil boom era (1973 - 1981 with manufacturing share of GDP reaching 11 percent) but has had a precipitous decline to about five percent in 2000.

The Nigerian story is that of unsustainability as a result of wasted opportunities. The SAP reform which was introduced in 1986 as a policy option to arrest the imminent collapse of the economy had the unsavoury effect of eroding the human capacity of the country and by extension marked its rapid deindustrialization. In other words, SAP contributed immensely in reducing the industrial capacity of Nigeria as demonstrated by declining capacity utilisation in the real sector, import dependence, reliance on a single commodity and poor performance of major infrastructural facilities amongst others (Federal Ministry of Information 2000:128)

Industrialisation is a process which does not start and stop with the formulation of an industrial blueprint or vision. It goes beyond that: not only does it encapsulate such decisions as the growth of the industrial sector as a whole, the choice and growth of separate industrial activities and the choice of projects within particular industries (Kirkpatrick, Lee and Nixon 1984:201); it also involves an efficient blend of the factors of production. The Nigeria economy is brimful with abundant human and material resources. But the mere possession of these resources does not automatically translate to industrialisation. The state of Nigerian economy shows that this is not so. Nnanna, Alade and Odoko (2003:5) have affirmed that Nigeria’s industrialisation crisis is rooted in the disparity between the availability of relevant factors of production and their efficient conversion towards improving the standard of living of the people as well as national economic indices.

Despite the identification of other intervening factors as contributing to the stagnation of the industrialisation of the Nigerian state, the mass emigration of educated Nigerians has had more pernicious effect on the prospects of Nigeria’s industrialisation. For as Ukaegbu

(1991:1) has argued, “the claim that inadequate physical infrastructures such as transportation, electricity, telecommunications and water supply hinder industrialization is to ignore the fact that these infrastructures are the products, and not the agents of industrialization”. In their study of the relationship between human capital and economic growth, Otu and Adenuga (2006:23) find that investment in human capital impacts positively on economic growth and therefore conclude that:

Nigeria can only position herself as a potent force through the quality of the products from the primary, secondary and tertiary school systems, and by making her manpower relevant in the highly competitive and globalized economy through a structured, well-funded and strategic planning of her educational institutions.

Indeed, Nigeria has been investing in its human resources through such policies as free compulsory Universal Basis Education (UBE) which grants access to every child to obtain primary education and tuition-free tertiary education. But the investments of the country in human capital development are enjoyed by the West who poach and lure these skilled and trained personnel with better offers than the home country economy could ever afford. This has been to the detriment of the home country as these vital human resources are lost to it.

The type of industrialisation adopted by Nigeria since its independence in 1960 was import substitution industrialisation (ISI). Ukaegbu (1991:2) points out that under ISI “industrial equipment and raw materials are transported into Nigeria, installed and used for routine production activities either by multinational corporations [MNCs], the state or indigenous private businessmen”. It is important to note that the objective of ISI was to produce within the country manufactured goods that were previously imported. The failure of ISI as an industrialisation strategy in the developing countries including Nigeria was exemplified by inefficiency as demonstrated by the production of manufactured good at higher cost than competing imports and the dependence of these goods on the maze of protection erected around them against foreign competition (Kirkpatrick, Lee and Nixon 1984:197).

Since the failure of ISI, emphasis shifted to export-oriented industrialisation (EOI): that is, local production of manufactured goods for external markets. EOI thus is a product of an amalgamation of two theoretical traditions: the liberal and mercantilist traditions. It strongly emphasizes that a state should pursue its comparative advantage in selected sectors

of the economy and promote exports from these sectors and also an interventionist state that evolves policies that limit domestic disruptions (Balaam and Veseth 2005:340). Many pro-EOI analyses contend that EOI leads to rapid growth in manufactured exports. Balassa (cited in Kirkpatrick, Lee and Nixon, 1984:198 – 199) argued that:

... export-oriented policies lead to better growth performance than policies favouring import substitution. This result is said to obtain because export-oriented policies, which provide similar incentives to sales in domestic and in foreign markets, lead to resource allocation according to comparative advantage, allow for greater capacity utilization, permit the exploitation of economies of sale, generate technological improvements in response to competition abroad and, in labour-surplus countries, contribute to increased employment.

But the weak domestic structures in the developing countries including Nigeria as well as the inequality in the global capitalist system combined to make even the export-oriented industrialisation unsuccessful. This was especially so since the industrial sector was the exclusive precinct of the MNCs and the countermeasures of state-propelled industrial enterprises was enmeshed in the characteristic ineptitude and state bureaucratic bottlenecks that undermined their capacity. Ukaegbu (1991:2) has argued that “there is hardly any difference (within developing countries) between the structure and operations of multinational and state industrial enterprises because the latter depend on the former for the supply of operational infrastructure (technology). Therefore, both have a similar structural characteristic”.

But whether based on ISI or EOI, a fundamental hindrance to progress in Nigeria’s industrialisation quest is the weak R&D tradition and the absence of competent corps of skilled professionals to spearhead and man the industrialisation process. Without proper human resources, the prospect of industrialisation hangs in the balance and remains a mere subject of speculation. For instance, the Africa Union (AU) Action Plan for the Accelerated Industrial Development of Africa which was adopted in 2008 is yet to spawn the industrialisation revolution that Africa needs in order to attain full integration into the global economy. There appears to be a tacit agreement amongst analysts to squarely locate the cause of Africa’s non-industrialisation in its domestic contradictions rather than on the skewed global capitalist system which has not only peripheralised these economies but created the conducive environment for the core countries to prey on it for its continued survival and ascendancy. Like the UNIDO Director-General, K.K. Yumkella, the Secretary

General of the UN, Ban Ki-moon in a message on the Africa Industrialisation Day 2009 reiterated this mainstream orthodoxy when he downplayed the centrality of human capital depletion of African countries in their industrial stagnation. Ban Ki-Moon asserts that:

Africa's pursuits of industrialization is hindered by many challenges including armed conflict, inadequate infrastructure, weak governance and institutions, limited financing and technological capabilities, and domestic policies that stifle entrepreneurship limit competition and raise the cost of doing business.

(<http://www.un.org/News/Press/docs/2009/sgsm12604.doc.htm>

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All these negativities are not as perniciously detrimental to Africa's quest for industrialisation as the dearth of relevant skilled personnel to power both industrial planning, execution and consolidation. The mass exodus of skilled Africans including Nigerians has made industrial planning and execution problematic. Apart from ISI, Nigeria relied on development planning as its strategy to enthrone comprehensive development. Development planning is an aspect of economic planning which Todaro (1981:430) conceptualises as "a deliberate governmental attempt to coordinate economic decision-making over the long run and to influence, direct and in some cases even control the level and growth of a nation's principal economic variables in order to achieve a pre-determined set of development objectives". Nigeria's first national development plan (1962-1968) recognised the indispensability of qualified personnel to power development and in its acute unavailability locally and therefore projected that development within this period would rely on experts from abroad. Indeed, the plan relied on external sources for its human capital needs. This of course, constituted the major rigidity that compromised the realisation of the goals of the first development plan apart from the Nigerian civil war.

The subsequent development plans – namely the Second National Development Plan (1970-74); the Third National Development Plan (1975-80) and the Fourth National Development Plan (1981-85) were wholly formulated and implemented by Nigerians. The point being highlighted here is the indispensability of indigenous human capital for the quest for domestic industrialisation and development. The reversal in the gain recorded in human capital development as a result of development planning came through SAP. During this period, especially between 1973 and 1981 which was the oil boom era, industrialisation soared with manufacturing share of GDP reaching 11 percent (Ikpeze, Soludo and Elekwa 2004).

Apart from the skewed global capitalist system which placed the Nigerian economy in a disadvantaged position, certain domestic policies especially indigenisation policy and the ascension of the state to the commanding heights of the economy facilitated the reversal of the gains of industrialisation. The indigenisation policy which was promoted by the Nigerian military govt on the grounds of economic nationalism sought to reserve certain categories of industrial activities, mostly service and manufacturing, for Nigerians. And the dominance of the economy by the state created distortions that asphyxiated the prospects for industrial revolution. According to Schatz (cited in Ikpeze, Soludo and Elekwa 2004):

For the most vigorous, capable, resourceful, well connected and lucky entrepreneurs and potential entrepreneurs (including politicians, civil servants, army officers, etc) productive economic activities, the creating of real income and wealth has faded in appeal. Access to and manipulation of the government spending process has become the golden gateway to fortune.

This state of affairs robbed the country of genuine entrepreneurs vitally germane for economic development. Ikpeze, Soludo and Elekwa (2004) in the face of this, described the trajectory of Nigerian capitalism as an unhealthy transition from “nurture capitalism” to “pirate capitalism”. In other words, government became the epicentre of economic activities accounting for 50 percent of GDP and 70 percent of modern sector employment in the 1980s and the military operators of government saw it as an opportunity to satisfy two conditions – the consolidation of their illegitimate government by unwholesome satiation of aggrieved elites and the empowerment of new sets of nouveaux-riche. The result, as Kohli (2004:359), observed was that “the Nigerian state was thus a very poor entrepreneur, wasting resources and appropriating others for personal use. ... so instead of real industrialization, the Nigerian state created a house of cards that crumbled just as soon as it was built”.

As already noted, Nigeria’s immediate post-independence economy was dominated by foreign companies and the indigenisation policy was a strategy to hand back the initiative for industrialisation as well as the reins and economic independence to Nigerians. Notwithstanding the distortions associated with the implementation of the indigenisation policy as exemplified by massive corruption, it gave impetus to the gradual metamorphosis and emergence of Nigerian entrepreneur-industrialist who veered from trading and commerce to manufacturing (Kohli 2004:355). But a combination of certain domestic factors including unaccountable government, poor planning, political interference, scarcity of managerial and technical personnel, heavy dependence on foreign technology, expertise, and inputs and

corruption amongst others created a detrimental economic environment that choked out the prospects for industrialisation.

Notwithstanding these rigidities in Nigerian economy, the effect of SAP on the economy with the usurpation of policy autonomy of the Nigerian state was the creation of deeper contradictions in its economy. With SAP's emphasis on the devaluation of Nigerian currency (the Naira) and the liberalisation of the economy, the Nigerian economy, like other African countries under the spell of SAP, strongly focused on import liberalisation at the expense of industrialisation. The rationalisation for import liberalisation was anchored on the logic that it would provide corrective signals and incentives to the manufacturing and other sectors, increases the level of competition and technical efficiency, and stimulate factor productivity (Wangwe and Semboja 2004). The erosion of the industrial capacity of Nigeria and other African countries attests to the farfetchedness of this policy. In fact import liberalisation spawned the process that effectively led to the de-industrialisation of Nigeria. The argument of Lewis (1994:447) corroborates it thus, "the SAP has failed to induce a significant response. Non oil sectors of the economy have displayed an anaemic performance, and adjustment has fostered de-industrialisation in import intensive activities". As Wikipedia has explained de-industrialisation "is a process of social and economic change caused by the removal or reduction of industrial capacity or activity in a country or region, especially heavy industry or manufacturing industry (<http://en.wikipedia.org/wiki/deindustrialisation>). The effect of de-industrialisation was the inducement of out-migration amongst highly trained personnel who had become more or less redundant in the Nigerian economy.

The period following SAP reversed the gains of industrialisation in Nigeria. The steady decline in the economic prospects of Nigeria had two interrelated effects: it contracted the economic space with the result that the manufacturing and industrial capacity as a whole was eroded. This erosion meant that highly trained personnel could not be wholly absorbed or adequately compensated thus leading to out-migration. The out-migration in turn robbed the industrial sector of the requisite manpower necessary to power industrialisation. The comparative effect has been recorded by Kohli (2004: 359) thus, "whereas manufacturing has contributed some 8 percent of the GDP in 1980, by 1995 its share had declined to 5 percent. Industry as a whole (including manufacturing, mining, construction, and so on) also declined; the average growth rate between 1980 and 1995 was close to 1 percent".

What this meant therefore was that since 1980 there had been a steady decline in the contribution of the industrial sector to the GDP, an indicator that all was not well with the industrialisation efforts of Nigeria and by extension its quest to join the league of newly

industrialising countries. Kohli (2004:398) has argued that high rates of investment alone cannot solve some critical problem of growth and industrialisation. According to him, “during periods of high oil prices, Nigeria was ‘Investing’ at a very high rate, as high in terms of aggregate figures as in parts of East Asia. And yet we know that sustained industrialisation did not result” (Kohli 2004:398).

But the investment of the Nigerian state was flawed because of the kind of industrialisation it undertook and the dearth of managerial and technical personnel to drive it. No doubt, the absence of a conducive operational environment (being product of favourable industrial policies) in addition to other factors already mentioned constituted an alternative explanation to the stagnation and lack of growth in Nigerian industrialisation. But the fact that policies do not operate in isolation or outside the sphere of competent corps of skilled personnel, it means that a further explanation is relevant. Granted that what created the initial condition for the out-immigration of relevant skilled personnel originated from policy failure but the emigration of these highly trained personnel created a lacuna that has stymied the prospects of growth in the level of Nigeria’s industrialisation.

The current state of Nigeria’s industrialisation depicts failure. This failure becomes even more dismal if Nigeria’s level of industrialisation is juxtaposed with other developing countries with comparable indices at the point of its independence in 1960. Presently, there is no basis for comparison between the level of Nigeria’s industrialisation and those of the countries of the South East Asia which shared almost the same set of indices in the 1960s: they have exited the common classification of developing countries and ascended the bracket of newly industrialising countries. Toyo (2002:55) ascribes the extraordinary success of the South East Asian countries to a number of factors especially their attention to technological development as well as favourable disposition of the West towards them as a result of their capitalist ideological preferences. The difference between Africa especially Nigeria and the South East Asian countries was the level of commitment to the building blocks of modern industrialisation. Toyo (2002:540) asserts:

It is not as if intelligence resided exclusively in South East Asia. The point really is not that the HPAEs [High Performing Asian Economies] pursued the policies better but that they used the policies to serve a more valid long-term growth strategy and therefore, adopted variants of these policies that produced better growth results. In the case of education, they had the communist challenge and example but anyone interested in a rapid industrialisation drive will want to educate those who will

serve that cause directly or indirectly, since modern industry calls for literacy.

Under SAP the IFIs were singularly opposed to social spending including spending on education. The slash in budgetary allocation to the education sector had two detrimental effects: it led to the decay of infrastructure in the sector and the massive out-migration of university teachers. The report of the Presidential Committee on Brain Drain set up by the Babangida military regime in 1988 revealed that Nigeria lost over 130,000 highly trained personnel including over 10,000 academics in the wake of SAP-induced distortions (Utile 2008; Onsando 2007). The implication of the emigration of highly skilled personnel from Africa is that R&D, a vital component of the industrialisation drive is not given the push necessary for breakthroughs in terms of invention and position modification of extant technologies. Africa as a whole is estimated to have about 20,000 scientists which translate to 3.6 percent of the world total. Most of these scientists have emigrated to the West for several reasons already enumerated especially better career prospects and attendant higher earnings. The effect on Africa is that its share of contributions to the world's scientific output had fallen from 0.5 to 0.3 percent (Onsando 2007).

The trajectory of development in the contemporary world system is intricately linked to the state of technology as well as technological progress. As the Global Economic prospects (2008:53) asserts, "technological progress is at the heart of human progress and development". What this implies is that the differentials in the domiciliation of modern technologies determine the categorization of countries in the modern world system. Both the neoclassical and endogenous growth theories agree that the prevalent poverty in developing countries inhered from these differentials in the access to, and command of, technologies (Mayer 2000:1). Technology transfer is all about buying into the technological superiority of the West with a view to appropriating some of these technologies within the domestic economies for increased productivity. Enhanced productivity is thus a function of technology. It is this mindset that underpinned the quest of developing countries to narrow the technological gap between them and the developed countries through the transfer of relevant technologies. Mayer (2000:3) has argued that improved access to modern technology alone does not necessarily lead to increased productivity as there is a complex interplay of several factors in the process of converting transferred technologies to optimal use. Other factors relevant in the absorption and efficient usage of transferred include human capital tailored to

man this new technology as well as relevant economic policies and institutional arrangements (Mayer 2000:3).

Nigeria has been in the vortex of the quest for technology transfer since its independence in 1960. Basically, technology is embodied in products, intermediate inputs and processes (Global Economic Prospects 2008:59). In other words, technology transfer is not a straightforward, simple and uncomplicated procedure but involves a complex interplay of several factors ranging from socio-economic, environmental, political, intellectual, infrastructural, human capitals and the locus of the interest of the developed countries amongst other factors. To this extent, technology transfer is not the sale or lease of goods or machineries but the “transfer of systematic knowledge for the manufacture of a product, for the application of a process or for the rendering of a service” (Konde 2008:3). The Nigerian economy has depended so much on foreign technology for its domestic sectoral needs. Such importations do not constitute technology transfer. For instance, according to the Director General of NOTAP, Engr. Umar Bindir, the Nigerian banking sector and other companies spent over N25 billion between 2000 and 2009 to acquire foreign software and other forms of ICT products (<http://www.balacingact-africa-com/news/en/issue-no-470/computing/nigeria-citizens-spends-n25-billion-on-software-imports-says-notap>). The acquisition of these ICT products does not necessarily translate to technology transfer. It could have become technology transfer if Nigeria had acquired the franchise and developed the capacity to reproduce them either for the domestic market, the African region or the international community. Ikiara (2000:8) has contended that:

Technology transfer can occur directly to local firms involved in joint venture with the MNC or indirectly, as a spillover benefit to unaffiliated local firms. There are four interrelated channels through which spillovers occur: vertical linkages between affiliates and their suppliers and customers in the host country, horizontal linkages between the affiliates and domestic firms in the same industry, labour turnover from the affiliates to domestic firms, and internationalization of R&D.

Technological progress in the modern world system is dictated by the developed countries through research and development. Research and development are driven by and anchored on relevant skilled personnel. All over the world, Nigerians add value to the various sectors of the developed economies. It is expected that the concept of brain circulation would enable Nigerians in the diaspora to bring home the knowledge they have acquired. But certain global frameworks especially within the auspices of IPRs have made this difficult, if not

impossible. And this is despite the acknowledgement of the developed countries about the indispensability of technology transfer in the integration of developing countries' economies into the world capitalist system (United Nations 2004:3).

These global frameworks have inhibited the maturation of the bold step of Nigeria to productively harness its scientist and technologists for technological takeoff. Following the recognition of the potential relevance of the diaspora and the subsequent establishment of NIDO and NNVS, the focus of the Nigerian government was to embark on brain gain project that would harness the millions of Nigerians in the diaspora for national development. And key expectation was to expand the frontiers of Nigeria's technological base through the expertise and knowledge of these diasporans. As recorded by Akwani (2007:2):

In July 2005, the first annual Science and technology conference between Nigerians in the Diaspora and those at home designed to map out the modalities of the 'brain gain' project, took place in Abuja. President Obasanjo [1999-2007] described the conference as a "first step toward a national objective [of harnessing the talents of Nigerians in the Diaspora] as the engine of change and accelerated development in Nigeria.

NOTAP, since its inception, has been involved in technology transfer, registering and participating in the negotiation processes leading to their acquisition. But technology transfer has been at the level of companies. Worldwide governments and companies especially MNCs have been the major sponsors of R&D. Such sponsorships involve huge capital outlays that make the outcome of R&D of utmost importance. Balaam and Veseth (2005:223) have argued that: "... unless firms can legally deny the use of newly created knowledge to other firms, rapid imitation will eliminate the profits from innovation necessary to recoup the original investment in research and development (R&D) that created the knowledge. The efforts to develop new technology would not be rewarded".

The developed countries have therefore strengthened both domestic and international laws to create a safety belt for inventions. Such safeguards, under the auspices of IPRs, have had negative effects on developing countries as they made the processes of technology transfer very difficult, selective, costly and exploitative. The contemporary international emphasis on IPRs, means that inventors and innovators have exclusive rights over their inventions in terms of openness and restrictions to their purchase, use and adaptation. It has been argued by Balaam and Veseth (2005:223) that IPRs are indispensable in keeping the production line of creativity operational. As they put it: "without intellectual property rights,

insufficient resources would be devoted to R&D, and far fewer new and lower-cost products would be available to consumers”.

Despite the value attached to IPRs as a boost to creativity they do not yield the same dividend to both developed and developing countries. IPRs stand as a framework to ensure that the global loopholes that allowed for technology knowledge seepages were effectively plugged as the diffusion of technology knowledge tended to narrow the gaps between and among nations. IPRs confer on firms and countries the key to control or liberalise access to new knowledge and technologies vital to bridge or expand the divide between development and underdevelopment in the modern world system. The developed countries have tended to negatively brand developing countries whose domestic legal frameworks to protect intellectual property rights are ineffective according to their standards. Robert Gilpin (cited in Balaam and Veseth 2005:225) captures it thus:

The increased significance of technological diffusion and the increasingly arbitrary nature of comparative advantage as well as military security concerns are causing the United States to make the protection of its high technology industries an important priority. In addition to its own efforts to slow down the outflow of industrial know-how, the U.S. has placed the international protection of intellectual property rights on agenda of trade negotiations.

The importance attached to IPRs is linked to the recognition of the role of technology as the driver of wealth and power and the need to ensure that there is no further extension of the frontiers of world’s technological countries. The US and other developed countries use their global advantage to institutionalise IPRs as a cardinal feature of the world order. The overall implication of IPRs is the deepening of the Third World development dilemma. Balaam and Veseth (2005:224) capture a part of this dilemma thus, “the losers are the people of Third World countries who pay monopoly prices for many goods and services and who receive the benefits of technological transfer only on terms dictated by firms of the developed world”. The other part is that IPRs circumscribes the possibility of African and Nigerian scientists and technologists in the diaspora from bringing their knowledge to bear upon any national project towards technological innovation or adaptation.

NOTAP is bestowed with several core responsibilities which essentially drive the technology transfer. Apart from registering, licensing and monitoring transactions for the use or transfer of trademarks and patents, NOTAP is also preoccupied with the task of seeking to protect Nigerian users or licensees of foreign marks or patented technology in any technical

agreement (Adewepo 2002:174; Okongwu 2006:4). Although non-registration of technology contracts does not render such contracts invalid, the idea behind NOTAP was for both Nigerians (home and in the diaspora) MNCs and foreigners to officially document the technologies being introduced into the Nigerian economy. The guidelines on the transfer of technology operated by NOTAP and other related agencies did not envisage individual or wholesale diaspora contributions. To that extent therefore, the Nigerian diaspora does not feature in the radar of NOTAP as a veritable source of technology transfer. **Table 4.19** shows that between 1999 and 2009, NOTAP brokered and registered a total of 1,237 (one thousand two hundred and thirty seven) technology agreements spanning such sectors as engineering, agro-allied, solid mineral and chemical and services sectors. The services sector recorded the highest number of registered technology agreements (570), followed by the solid mineral and chemical sector (256) and the engineering sector (233 agreements). The least was the agro-allied sector with 178 agreements.

**Table 4.19: Number of Technology Agreements Registered Per Industrial Sector  
(1999 – December 2009)**

<b>Year</b>	<b>Agro</b>	<b>SMC</b>	<b>Eng</b>	<b>Serv</b>	<b>Total</b>
<b>1999</b>	22	17	20	11	70
<b>2000</b>	17	24	13	13	67
<b>2001</b>	14	29	23	21	87
<b>2002</b>	14	18	18	29	79
<b>2003</b>	20	26	13	31	90
<b>2004</b>	9	24	13	37	83
<b>2005</b>	14	29	39	64	146
<b>2006</b>	20	34	24	71	149
<b>2007</b>	19	23	28	100	170
<b>2008</b>	15	16	27	81	139
<b>2009</b>	14	16	15	112	157
<b>Total</b>	<b>178</b>	<b>256</b>	<b>233</b>	<b>570</b>	<b>1237</b>

Source: <http://www.notap.gov.ng/content/technology-transfer>

**Table 4.20** shows the breakdown of technology agreements submitted per industrial sector. In 1999, 88 technology agreements were submitted. Although the number plummeted to 69 in 2000, it however, rose progressively from 113, 121 and 153 in 2001, 2002, and 2003 respectively. It fell to 103 in 2004 and rose to 213 in 2005.

**Table 4.20: Number of Technology Agreement Submitted Per Industrial Sector  
(1999–2005)**

Year	Agro	SMC	Eng	Serv	Total
1999	24	25	24	15	88
2000	21	20	16	12	69
2001	17	33	30	33	113
2002	20	34	27	40	121
2003	39	29	20	65	153
2004	13	17	27	46	103
2005	15	42	53	103	213

Source *Okongwu 2006:13*

The service sector had the highest agreement followed by the solid mineral and chemical sector. The sector with the least technology agreement was the agro-allied. The engineering sector had the third highest agreements. An interesting observation is that the trend of technology agreements in Nigeria in the period under review did not suggest a serious trajectory towards development. The services sector which recorded the highest agreements cannot, in real terms, boost the economy in the absence of a virile productive sector. The low technology agreements in the agro-allied sector despite its potentialities as well as its pivotal importance as an engine of development are suggestive of skewness in technology acquisition. It also portrays lack of policy in the hierarchisation of technologies for national development.

**Table 4.21** shows technology collaboration by source. The data show that the bulk of technology collaborative efforts emanated from the West.

**Table 4.21: Technology Collaboration (By Source)**

<b>Year</b>	<b>UK</b>	<b>USA</b>	<b>Western Europe</b>	<b>Others</b>	<b>Total</b>
1999	28	0	29	13	70
2000	14	18	18	17	67
2001	26	8	29	24	87
2002	22	12	27	18	79
2003	18	10	34	28	90
2004	29	7	29	18	83
2005	40	16	40	50	146

Source: Okongwu 2006:23

These technologies transferred were sourced from major OECD countries although such countries as India and South Africa featured in recent times. As a result of CBN policy in bank recapitalization and the upgrading of ICT backbones, Nigerian banks reportedly spent over N25 billion in the 2000s to acquire foreign software and other forms of information and communication technologies (<http://www.balacingact-africa-com/news/en/issue-no-470/computing/nigeria-citizens-spends-n25-billion-on-software-imports-says-notap>). The acquisition of these technologies also attracted technology transfer fees running into billions of Naira.

**Table 4.22** approved technology transfer fees between 2000 and 2006 for major sources of ICT providers for Nigeria's banking sector on account upgrading and modernisation of the sector. India is quite dominant as it accounted for 54.84 percent of total approved fees.

**Table 4.22: Approved Technology Transfer Fees (Major Sources for Nigeria's Banking Sector)**

Source Country/ Region	Amount Approved (₦ million)							Total in ₦	%
	2000	2001	2002	2003	2004	2005	2006		
USA	49.68	49.68	-	40.12	8.38	23.44	1.60	172.90	3.88
UK	66.14	66.14	66.14	32.93	10.31	111.32	112.18	465.16	10.44
Other EU	16.15	9.83	33.33	23.95	19.49	41.84	271.49	416.08	9.34
India	138.60	192.6	445.80	545.18	456.57	471.42	416.18	2666.43	59.84
South Africa	-	-	-	11.11	140.45	-	10.23	161.79	3.63
Others	-	54.00	123.39	123.39	119.47	94.75	58.34	573.34	12.87
Total	270.57	372.33	668.66	776.68	754.67	742.77	870.02	9455.70	100.00

Source Okongwu 2006:37

The strong showing of India as a source of technology transfer was a result of its global importance as software providers as well as the fact that what the Nigerian banking sector required was mainly software. This explained the total technology transfer fees of N2, 666.43 million between 2000 and 2006 ahead of other sources.

Technology transfers have cost the Nigerian economy enormously. **Table 4.23** shows that between 1999 and August 2006, Nigeria spent over US\$2.4 billion to procure foreign technologies to boost its development. Within the same period, NOTAP calculated that it saved Nigeria US\$495.26 million from likely overpricing of these technologies.

**Table 4.23: Cost of Technology and Financial Savings**

Year	*Cost of Technology		*Financial Savings	
	₦	\$	₦	\$
1999	10,194,520	106,192,922.1	1,481,521,816	15,432,518.92
2000	15,287,511,776	152,815,117.7	4,096,987,548	40,969,875.48
2001	26,747,425,560	238,816,299.6	2,339,720,265	20,890,359.51
2002	21,147,389,762	185,992,873.9	5,314,128,919	46,738,161.12
2003	17,801,837,323	140,171,947.4	3,746,419,005	29,499,362.24
2004	27,352,407,526.60	202,610,426.1	12,390,510,907	91,781,562.22
2005	127,820,579,643	946,819,108.1	21,442,120,686	158,830,523.6
2006**	52,458,158,276	388,578,950.1	12,300,676,039	91,116,118.74

\*Exchange Rate calculated from CBN's posted yearly exchange rate average

\*\*Covers up to August 2006

Source: *Okongwu 2006:30*

The real savings which NOTAP would have recorded was the mobilisation of Nigerian diaspora as a source of technology transfer considering their presence in major sectors of the OECD countries. Ironically, instead of African and Nigerian diaspora being factored into the domestic development models, they are sidelined in favour of technical assistance leading Kapur (2001:282) to argue that brain drain repatriation is not only more cost-effective but also more efficient mechanism for technical assistance. But Nigerian diaspora have not featured, in any direct manner, in the technology transfer framework of Nigeria. The reason is not far-fetched as three factors, more than others, appeared to have

made it difficult for technology transfer through the diaspora. First is the international development in the form of WTO's TRIPS. The TRIPS Agreement of 1994 which obliged member-states to provide intellectual property protection in its laws also established minimum standards for the availability, scope and use of seven forms of intellectual property namely, copyright, trademarks, geographical indications, industrial designs, patents, layout designs for integrated circuits and undisclosed information (trade secrets) (Ibigbami and Orji 2009:7). Second is the nature of R&D. because of the capital intensive nature of R&D, only TNCs and states appear to fund big-time researches that actually translate into vital technologies necessary to drive the development prospects of developing countries. In the United States, for example, publicly-developed technology comprising the government, universities and non-profit institutions) account for 34 percent or US\$95 billion of research while industries and businesses account for 66 percent or US\$181 billion of research (Barton 2007:8). What this implies is that these funders control the outcome of research and they do so to advance their advantages. Nigerian scientists and technologists involved in these researches cannot independently transfer their knowledge to their home countries without breaking the various provisions of the IPR Agreement. For instance, Keshi (2008:4) marvels that:

In July 2007, President Umaru Musa Yar'Adua [2007-2010] challenged the Nigerian Diaspora professional's (sic) in IT and Health to work in tandem with the Federal Ministries of Science and technology and health to fashion out how they can be meaningfully engaged in the acceleration of IT development in Nigeria as well as improve the health system. Almost six months after, not a response yet from the Diaspora.

Obviously, the Nigerian diaspora just like the diaspora of other developing countries cannot transpose their know-how onto the domestic turf without clearing with their funders or meeting certain conditions. Third, even where such transference of knowledge could be possible, many developing countries, including Nigeria lack the necessary domestic infrastructure to appropriate and adapt such knowledge for technology development purposes. From available data, technology transfers to Nigeria have been mainly on the platform of trade agreements based on patents (importation of technologies). The nature of the technologies under this cadre is that they are "unprotected" technologies, that is, they are technologies whose utilitarian value is no longer treasured by the developed countries for their productive capability.

## **CHAPTER 5**

### **POLICY, LEGISLATIVE AND INSTITUTIONAL FRAMEWORKS FOR THE INTEGRATION OF DIASPORAN RESOURCES IN NIGERIA**

#### **5.1 INTRODUCTION**

Prior to 1999 when Nigeria returned to democratic rule after decades of military dictatorship, migration and diaspora issues were not within the purview of the country's policy radar in any systematic way. The contemporary government attention to these issues arose fortuitously. In the course of former President Olusegun Obasanjo's shuttle diplomacy, to reintegrate Nigeria into the comity of nations following years of international ostracism and to canvass for foreign direct investment, he encountered appreciable number of Nigerians in every major capital city of the world. These encounters excited government's interest and translated into the formation of umbrella organisations and other institutional frameworks to harness the potentials of the Nigerian diaspora. The Nigerian government has made some progress in the efforts to leverage the diaspora into national development but a lot needs to be done. This chapter evaluates the progress made in terms of policy frameworks, legislative backing and the short- and long-term programme of action by the Nigerian government to mainstream its diaspora into national development. It also examines the experiences of several countries and how their experiences could be domesticated for national development.

#### **5.2 MIGRATIONAL TRENDS AND MIGRATION POLICY FRAMEWORKS IN NIGERIA**

Migration in Nigeria is characterised by the movement of people internally and internationally. Internal migration consists of rural-urban and forced migration. Oftentimes, the final destination of rural-urban migration is abroad. Rural-urban migration connotes the voluntary movement of people from the rural areas to the urban centres, for a legion of reasons, but often in search of a better life. Forced migration is the product of forced displacement resulting from such factors as ethnic and religious conflicts, conflicts arising

from crude oil mining and refining, effects of natural disasters, and peasant and pastoralist conflicts over access to non-renewable resources.

Prior to the current democratic dispensation, which started in 1999, Nigeria did not have any coherent policy on migration, whether internally, covering rural-urban population movement, or externally, covering the emigration of its human capital abroad. Migration in Nigeria's policy environment was narrowly conceived in terms of rural-urban drift, and strategies to address them consisted of piecemeal policies aimed at discouraging people from drifting to urban centres because of the pressure on their infrastructural facilities. Apart from the incapacity of most urban areas in Nigeria to accommodate the pressures from rural migration, the fact that rural migrants consist of able-bodied young men and women undermine rural economies and deepen the contradictions in the prospects of rural development.

The traditional challenge to the Nigerian government in relation to rural-urban migrational trend has been how to strike a balance in the net-migration in order to maintain the urbanity of the cities. As Wosu and Anele (2010:210) opine, "the concentration of the urban populations of many young persons, children alike, and women from rural communities engenders urban nuisance and growth of large urban agglomerates". Several factors underpin the movement of people to urban areas. The first is the failure of government to enthrone an integrated development model. The implication is that there is a sharp line between urban and rural areas in terms of levels of development. The most obvious manifestation of this division is the near absolute lack of socio-economic infrastructures in the rural areas and their concentration in the urban areas. The second factor is government's neglect of agriculture which is the mainstay of rural economies. Since the discovery of oil in Nigeria and the global appreciation of its price in the 1970s, agriculture, which used to be the mainstay of the Nigerian economy, through such cash crops like cocoa, rubber, groundnut, palm oil and so on, was abandoned in preference for quick oil money. Despite the importance of oil in the Nigerian economy as attested by its contribution of 95 percent to the country's foreign exchange earnings and about 80 percent of budgetary revenues, agriculture remains the main source of revenue as about between 60 and 70 percent of the population depend on it for their livelihoods ([http://en.wikipedia.org/wiki/economy\\_of\\_Nigeria](http://en.wikipedia.org/wiki/economy_of_Nigeria); Oni et al 2009:5). The trajectory of the Nigerian economy to monoculturalism based on oil and the total abandonment of agriculture deepened poverty, not just in the rural areas but throughout Nigeria. According to NBS (2009:73), rural poverty rose from 28.3 percent in 1980 to 63.3 percent in 2004.

**Table 5.1: Rural-Urban Spread in Poverty level (1980-2004)**

Levels	1980	1985	1992	1996	2004
National	27.2	46.3	42.7	65.6	54.4
Urban	17.2	37.8	37.5	58.0	43.2
Rural	28.3	51.4	46.0	69.3	63.3

*(Source: NBS 2009:73)*

**Table 5.1** above shows the rural-urban spread of poverty in Nigeria between 1980 and 2004. Rural poverty increased from 28.3 percent in 1980 to 51.4 percent in 1985. It fell to 46.0 percent in 1992 before rising to 69.3 percent in 1996. Since 2004 when Nigeria's National Bureau of Statistics (NBS) conducted its national living Standard Survey, rural poverty has been 63.3 percent.

The neglect of agriculture by the government and attendant dwindling of agricultural productivity, as a result of anti-people land policies, scarcity of land, impoverished soil, declining crop yields, poor harvests, soil erosion, lack of storage facilities, and lack of government subsidies to procure improved seedlings and other agricultural inputs among others, motorised rural-urban migration. Abbass (2011:4) elaborates that, “

With agricultural pursuits becoming more and more unbearable and unaffordable by the rural peasantry... . [T]hey pathetically abandoned farming by selling and mortgaging their farmlands to move out of rural environment for urban life to earn wage labour or engage in other lumpen-proletarian work.

The high level of rural poverty, which is associated with the failure of agriculture, has been the major push factor in rural-urban migration in Nigeria. Rural poverty is linked to the incapacity of the agricultural sector to sustain wealth creation in comparison to the wealth generated by oil and associated sectors in the urban areas. For instance, while Nigeria has a total land area of 98.3 million hectares, of which only 71.2 million hectares are cultivatable, only 34.2 million hectares (or about 48 percent of the cultivatable area) are cultivated with less than 1 percent irrigated (FMARD 2001). The failure of the Nigerian state to place agriculture in its proper place in the economy and the attendant collapse of the rural economy motivated emigration from the rural areas to both the urban centres and abroad. As Mohammed-Lawal and Atte (2006:2) corroborate, “Nigerian agriculture, to a large extent,

still possesses the characteristics of a peasant economy that was prominent in the pre-independence period”.

Undoubtedly, the Nigerian government had made efforts in the past to revamp the agricultural sector and position it as an alternative source of wealth generation but these efforts did not frontally impact on rural-urban migration. The evaluation of various government efforts to develop Nigeria’s agricultural potentials adjudged them, without exception as failures (Iruonagbe 2009:31-32). As Nwaka (2005:6) contends, “programmes for rural development aimed at improving agricultural productivity and export earnings, and ensuring self-sufficiency in food, were marred by organizational bottlenecks. ... Vast amounts of resources were misallocated or otherwise misappropriated in projects of doubtful priority”. It could be argued that part of the reasons why these various government efforts, such as Gowon’s National Accelerated Food Production Programme (NAFPP); Obasanjo’s Operation Feed the Nation (OFN); Shagari’s Green Revolution (GR); Babangida’s Directorate of Food, Roads and Rural Infrastructure (DFRRI); the River Basins Development Programmes and a host of others, failed in terms of reversing the trend of rural-urban migration was that they did not factor into them specific modalities to address it. Thus, despite the implementation of these programmes, the seeming unidirectional influx of young people into urban areas continued.

One of the greatest challenges of internal migration in Nigeria is the paradox of being least urbanised and yet experiencing the phenomenon of over-urbanisation as a result of the fact that urban growth is not driven by industrialization but by escape from the mire of poverty in the rural areas. (<http://www.onlinenigeria.com/population/?blurb=135>). Other challenges associated with rural-urban migration include such negativities as: the depopulation of the rural areas; rural underdevelopment; the distortion of the urban setting through overpopulation, the loss of the necessary manpower for rural development; congestion of urban centres resulting in extreme pressures on social amenities; continued skewness in the rate of development between the urban and rural areas and high rate of crimes (Iruonagbe 2009:39-41). Although rural-urban migration has been in the front burner of government policy consideration as a result of the aforementioned negativities, there is no existing government policy to either contain it or incentivize reverse-migration. This is in spite of the availability of data generated through the 1991 Post-Census Enumeration Survey (PES) on internal migration and Urbanisation Survey of 1993 (Afolayan et al 2009:47).

The greatest migration challenge to Nigeria is international migration and its associated brain drain. There are two angles to international migration: immigration and

emigration. While a lot of Nigerians emigrate, so many foreigners, from diverse countries, head to Nigeria. The expansion in the Nigerian economy as a result of oil wealth and its afrocentric foreign policy in the 1970s were the twin pull factors that attracted so many immigrants, the majority of who emigrated from neighboring ECOWAS countries. While the Nigerian economy blossomed, there was no problem with immigration into Nigeria, and it did not matter to policy makers whether migrants were legally admitted or came through extra-legal means. Indeed, the buoyancy of the Nigerian economy and the seemingly infinite demand for skilled labour, which the domestic economy could not match, led to the influx of both skilled and unskilled labour from all parts of Africa and the world. It was reported that about 77 percent of West Africans, including professionals who resided in Nigeria during that period did so illegally (Makinwa-Adebusoye 1995).

However, the reversal in Nigeria's economic fortunes and the attendant budgetary constraints urgently required certain domestic policies to be formulated and implemented. As part of the country's austerity measures, its policy, with regard to the large pool of immigrants in the country, was to expel those it categorised as illegal aliens. This category of immigrants was estimated to be in the neighbourhood of 1.5 to 2.7 million people. The mass expulsion of illegal aliens from Nigeria in 1983 and 1985 did not constitute a clear-cut policy on immigration. Rather, it was an ad hoc measure birthed by two different circumstances: in 1983, it was driven by the economic recession that hit the country as a result of decline in oil revenues; and, in 1985, it was as a result of change of government (Miller 1999:27). Although mass expulsion had been variously used by states to address illegal migration, they are no longer fashionable. As Miller (1999:27) contends;

Mass expulsions of aliens almost invariably violate international norms espoused by the International Labour Organisation and the branches of the United Nations concerned with human rights. While states do have a right to return illegal migrants, long-term, legally admitted alien residents and citizens have a different status in international law and in democratic settings.

What countries have done in recent times is to evolve immigration policies that address a wide range of immigration issues. Migrants have, in contemporary world setting, been granted enormous rights ranging from refugee and asylum status and protected by international laws. The trend now is that long-term resident aliens cannot be arbitrarily deported or be made to leave a country against their will (Miller 1999:28).

The earliest Nigerian government’s response to the mass emigration of Nigerians can be periodised to 1984 when the then government of General Muhammadu Buhari (1984-1985) embarked upon series of enlightenment campaigns in the mass media urging Nigerians to remain at home for national development. In a way, what motorised this campaign was the quest to create a façade of patriotism as basis to secure legitimacy for the regime. Despite the crushing economic condition in Nigeria and apparent limited opportunities available, the regime painted a picture that the country could be fixed if only Nigerians would remain at home to build and defend it. The media campaign demonised emigration and painted the Nigerian migrants as unpatriotic “Andrews” who were unthinkingly checking out, leaving the country to its peril (Hagher 2011:122). Beside the jingles relayed mainly through the state-owned media houses - the Nigeria Television Authority (NTA), the Federal Radio Corporation of Nigeria and the Daily Times, there was no conscious government policy to further address mass emigration. It was only in the regime of General Ibrahim Babangida (1985-1993) that further tangential policy was adopted. The regime, in 1992, approved dual citizenship for Nigerians. At the time, this dual nationality law was cynically perceived as an elitist law birthed by the exigency of legitimising the nationality of elite children born in foreign countries.

**Table 5.2: Stakeholders/Institutional Actors Managing Diverse Migration Issues in Nigeria**

<b>S/No.</b>	<b>Institutional Actor</b>	<b>Area of Migration Responsibility</b>
1	National Commission for Refugees (NCFR). Established by Decree No. 52 of 1989 (now Chapter N21, Laws of the Federation of Nigeria, 2004)	<ul style="list-style-type: none"> <li>- The Commission is mandated to: lay down general guidelines and overall policy on issues relating to refugees and asylum seekers; to advise the government on policy matters in relation to refugees in Nigeria; to manage internally displaced persons and act as a focal agency for migration management and resettlement of internally-displaced persons.</li> <li>- National migration policy</li> </ul>
2	Ministry of Foreign Affairs (MFA)	<ul style="list-style-type: none"> <li>- Consular matters, including protecting the interests of Nigerians abroad; pilgrimage arrangements; repatriation of destitute Nigerians; issuance of passports, travel certificates and seafarers’ identity cards in</li> </ul>

		missions abroad.
3	Ministry of Internal Affairs (MIA)	- The ministry's statutory responsibilities include: the formulation and implementation of policies and programmes on the following: the registration of voluntary organisations; the issuance of expatriate quota allocations; the granting of Nigerian citizenship; immigration and visas; seafarers' identity cards/certificates; passports and travel documents; permit for foreign participation in business; the movement of aliens within the country and the repatriation of aliens.
4	Nigerian Immigration Service (NIS) (An Agency of the Ministry of internal Affairs)	- Performs most of the migration responsibility of MIA. It also undertakes: the registration of expatriates for naturalisation; external border management and the control of travel documents.
5	Ministry of Labour and Productivity (MLP)	- Sets up Labour Migration Desk in 2006 to facilitate favourable terms of employment for Nigerians desiring to travel abroad as well resolve contending labour issues involving the diaspora; facilitates offers for Nigerians to travel and work legitimately abroad; mechanism to facilitate bilateral and multilateral agreements on employment; assists in ensuring safe and unhindered remittances.
6	Ministry of Justice	- Oversees all the legal matters including government migration obligations under international conventions, bilateral and multilateral agreements; handling of extraditions etc.
7	National Population Commission (Established by Decree No. 23 of 1988)	- Periodically conducts national census and surveys; oversees continuous registration of births and deaths; collect, collate and publish data on migration statistics obtained through internal migration surveys and entry and exit cards from the Nigerian Immigration border posts.
8	National Agency for the Prohibition of Trafficking in Persons and Other	- To coordinate all laws on the trafficking on persons and related offences, including

	Related Matters (NAPTIP) (Established 8 August 2003).	eradication, suppression and facilitation of investigation into human trafficking.
9	Central Bank of Nigeria of Nigeria	- Collect, collate and publish remittances; make policies guiding the operations of MTOs, commercial banks, bureaux de change.
10	National Planning Commission	- Data Management - National migration policies
11	National Assembly	- Makes laws for the protection and harnessing of migrants for national development

Sources: Compiled from Afolayan et al 2009; Adepoju 2009

Subsequently, there was inaction on migration and Nigerian diaspora until the fourth democratic dispensation that commenced in 1999. Former President Olusegun Obasanjo, in the course of his shuttle diplomacy, encountered many Nigerians in every capital city he visited in search of foreign investors. The seeming ubiquity of Nigerians around the world ignited the perception that they represented a reserve army of human resources potentially relevant to the country's development drive. This realisation underpinned the subsequent policies that the Nigerian government engineered into existence to address migration and diaspora issues. But, beyond this realisation, other emerging scenarios, such as, the desperate and dangerous manner of emigration of irregular migrants, and increase in smuggling and human trafficking rings, helped to stimulate the need for a national policy (Afolayan et al 2009:69). The Nigerian government, in 2005, through the office of the Special Assistant to the President on Diaspora Affairs collaborated with the International Organisation of Migration (IOM) to produce a national policy on migration (Afolayan et al 2009:69). After exhaustive sessions, including a national stakeholders' conference where policy makers and relevant migration practitioners made their inputs, a National Policy on Migration was developed. However, policy summersaults, constant readjustment in the assignment of government functions among government parastatals, and lack of continuity arising from changes in the composition of government functionaries affected the securement of approval from the Federal Executive Council and the presidency. The expectation, since 2007 when the policy document was finalised and submitted to the federal government, that it would soon come into effect has not materialised as at 2011. The major problems with the policy are: the seeming ambivalence of the government about the government parastatal to manage

it and the jostling among government parastatals to oversee its implementation. While in 2005, the Office of the Special Assistant to the President on Diaspora Affairs initiated and collaborated with IOM to finalise the policy, by 2009, the government issued a presidential directive mandating the National Commission for Refugees (NCFR) to coordinate matters relating to migration and internally displaced persons in Nigeria (Afolayan et al 2009:70). This move provided the excuse for delay as the Commission began the process of revisiting it. As has been consistent with governance in Nigeria, the failure of former President Obasanjo, who initiated the Programme, to complete it had put the entire policy in serious jeopardy of abandonment as several contending interests would and in fact did appear on the horizon, jostling to be the implementers of the migration policy (Odiogor 2010). By 17<sup>th</sup> March 2011, a one-day migration policy conference was held in Abuja where two key draft migration policies namely, the National Migration Policy and the National Policy on Internally Displaced Persons were presented to the Honourable Minister for Special Duties through the Permanent Secretary of the Ministry, Mrs Rabi Jimeta (mni) by the Commissioner of the National Commission for Refugees for onward submission to the Federal Executive Council for adoption (<http://migrantrights.info/?p=491> ).

Nigeria's National Policy on Migration represents a pioneering national effort in evolving a master plan to address the multi-variegated issues relating to migration. The major promise of the policy once it becomes operational is that it provides the necessary platform to evolve an integrated plan of action as well as the budgetary requirements to leverage on the benefits of migration and deal with the strictures associated with it (Odiogor 2010). The migration policy covers a lot of area including migration and development; migration and cross-cutting social issues; national security and irregular movement; and forced displacement; the human rights of migrants; organised labour migration; internal migration; national population; migration data and statistics; funding for migration management and the establishment of an agency or commission to oversee its over all implementation (Afolayan etal 2009:70; Adepoju 2009:25).

There is also a new development. Recently, a draft National Labour Migration Policy (NLMP) was handed over to the Nigerian government through the Minister of Labour and Productivity, Chief Emeka Worgu by the duo of IOM's Chief of Mission, Mr Martin Ocaga and the International Labour Organisation (ILO) representative, Mr Dennis Zulu. Prior to this, Nigeria did not have a reference document guiding labour migration or modalities for gainful employment in destination countries. The utilitarian value of the National Labour Migration Policy is embedded in its capacity to provide the basis for the evolvement of a

conducive policy framework that is promotive of regular labour migration, protective of national economic interests and supportive of the aspirations of the migrant worker through the initiation of valid contracts and obtainment of better welfare deals for them (Vanguard 2011). Another important value of the National Labour Migration Policy, in conjunction with the Migration Policy is its envisaged capacity to ensure the shoring up of the skill of the Nigerian youth and job seekers to compete in the international labour market as well as regulating the exportation of skill in such a way as to ensure that emigration does not lead to manpower crisis in critical sectors of the economy (Vanguard 2011). As at 2011, none of these national policies has become operational as the two chambers of National Assembly are yet to pass them into law.

### **5.3 NIGERIA'S DEVELOPMENT VISIONS AND THE CHALLENGES OF BRAIN DRAIN**

The origin of Nigeria's post-colonial attempts at envisioning the trajectory of its development can be properly situated at the early years of independence when development planning was first conceived, packaged and implemented. Since 1962 when the first post-independence Development Plan was flagged off, Nigeria had stuck to development planning as its core strategy of streamlining competing developmental models, interests and aspirations until the economic crisis of the 1980s. Between 1962 and 1985, Nigeria had four development plans viz: First Development Plan 1962-1968, Second Development Plan 1970-74; Third Development Plan 1975-80 and Fourth Development Plan 1981-85. Despite differing opinions about the impact of national planning on the overall scorecard of Nigeria's development efforts, it can never be denied that these plans had far-reaching positive effects on Nigeria's economic development.

Right from the period preceding the formulation of the first development plan, it was obvious that Nigeria lacked the relevant crop of competent personnel to spearhead its post-independence development. Indeed, the first development plan recognised the indispensability of the assistance of foreign personnel to midwife and sustain the agenda of the plan (Obi and Obikeze 2005:70). In addition to initiating industrialisation and other developmental projects, the various development plans also embarked upon massive human capital development. The good run of the Nigerian economy during this period ensured the

absorption and adequate compensation of the developed human capital. In other words, the developmental strides that were made through these development plans as exemplified by the springing up of all manner of industrial concerns ensured that people so trained were immediately absorbed. The concern then was not about the emigration of Nigeria's premium human capital.

The onset of economic crisis in the 1980s created contradictions that made the human resources that were hitherto adequate for domestic needs superfluous as industrial concerns lost their capacity for growth. The contraction in the Nigerian economy introduced untoward consequences. As Ikpeze, Soludo and Elekwa (2004) affirm:

Nigeria's structural defects, which had been papered over by the oil boom, came to the fore. Foreign exchange difficulties became acute, and the entire manufacturing sector (based on ISI strategy [import-substitution industrialisation] and heavy dependence on imported inputs) was in serious trouble.

What this meant was that the industrial concerns found it very difficult to meet their business obligations in terms of capacity utilization, foreign exchange for vital spares and raw materials, welfare package for workers and so on. While some companies closed down, others operated at substantially reduced capacity with attendant downsizing of their workforce.

The response of the Nigerian government to the intruding economic crisis that threatened its economic survival was the adoption of the SAP package. The failure of SAP to transform the economy as exemplified by worsening economic condition of the country and its citizenry opened the floodgate of contending policy measures in the 1990s (Sampson 2007:71). The seemingly intractable economic crisis principally induced massive emigration of such professionals as engineers, medical doctors, nurses and other health personnel, scientists and so on. A deviation from the traditional development planning model was introduced on 27<sup>th</sup> November, 1996 when the then Head of State, the late General Sani Abacha (1993-1998) set up a 248-man committee to fashion and formulate a vision that would accord concreteness to:

The conviction that the country's poor economic and political performance is neither representative of her potential nor in consonance with the aspirations of her citizens and their determination that their nation should occupy her rightful place in the comity of nations (Main Report of Vision 2010, 1997:i).

The Vision 2010 Committee worked for 10 months through 53 sub-committees and 8 clusters of sub-committee and covered 13 critical success factors. In addition, the Committee dealt with 17 economic issues, 17 special issues and 6 general issues which were envisaged to anchor the robust transformation of Nigeria by 2010. Despite representation made by several bodies about the brain drain phenomenon and the enormity of its negative impact on the development of Nigeria, the Vision did not elaborately confront this problem from the perspective of devising strategies to harness the country's brain in the diaspora. It only devised preventive measures anchored on providing more jobs and creating more latitude for the constructive engagement of the youths in national development. Although this flaw could have been rectified in the course of implementing this vision, it did not see the light of the day as a result of the death of its initiator the late General Sani Abacha in 1998.

Therefore, prior to 1999, Nigeria did not have any development plan or vision to serve as a compass for the trajectory of its development. It could not have evolved such an integrated plan because of the contradictions threatening to asphyxiate its economy: huge debt burden, macro-economic instability, crisis in the oil producing region, crashing oil prices and so on. These contradictions circumscribed the economic sovereignty of Nigeria as exemplified by the insistence of IFIs that certain minimum domestic reforms must be implemented. But between 1999 and 2003, the government of then President Obasanjo (1999-2007) unveiled its economic direction which, first of all, aimed at resolving the contradictions that bedevilled the Nigerian economy and secondly to enthrone:

One of the leading economies in Africa: an economy that experiences rapid and sustained growth at not less than 6-10% per annum at the end of the present Administration's tenure. The creation of a national economy that is highly competitive, responsive to incentives, private sector-led, broad-based, diversified, market-oriented and open, but based on internal momentum for its growth (FGN 2000:8-9).

These economic directions paved the way for NEEDS. NEEDS (2003-2007) guided the reform framework that drove Nigeria's macro-economic stability. Vision 2020 is a 13-year plan to consolidate the gains purportedly made in the implementation of NEEDS. Vision 2020 is a roadmap to transforming Nigeria from where it is now (classified as low income country) to a higher pedestal of being amongst the top 20 developed countries. As Vision 2020 document asserts, its major objective is to set the machinery in motion such that "by 2020 Nigeria will be one of the 20 largest economies in the world able to consolidate its

leadership role in Africa and establish itself as a significant player in the global economic and political arena” (<http://www.nv2020.org/?Concept>). A pertinent question is how Nigeria can achieve this national dream with the bulk of its bright minds in every sphere of human endeavour domiciled in the western countries where they are already integrated.

The institutional framework for Vision 2020 is quite elaborate and comprises the National Council on Vision 2020 (NCV 2020) which is at the apex. The NCV 2020 which is under the chairmanship of the president is made up of 27 members and provides leadership and direction necessary to salvage the entire nation (<http://www.nv2020.org/framework#nsc>). Other organs of the institutional framework include: National Steering Committee composed of 70 members, Secretariat of the National Steering Committee, National Technical Working Group for V2020, Stakeholder V2020 Development Committees and Economic Management Team.

Vision 2020 recognises that the achievement of the core goal of elevating Nigeria to the top 20 bracket in the world in 2020 is dependent on the enhancement of economic development performance through such indicative parameters as:

- (a) Stable polity by 2020;
- (b) A sound, stable and globally competitive economy with a GDP of not less than US\$900 billion and a per capita income of not less than US\$4,000 per annum;
- (c) Adequate infrastructural services to support the economy;
- (d) Modern and vibrant education system which provides opportunity for education to every Nigerian and which meets the manpower needs of the economy;
- (e) Responsive health sector that supports and sustains life expectancy of not less than 70 years and which also reduces to the barest minimum the burden of infectious diseases;
- (f) A modern technologically-enabled agricultural sector that utilises the vast agricultural endowments of the country to ensure national food security and become a source of foreign exchange earnings.
- (g) A vibrant and globally competitive manufacturing sector that contributes significantly to the GDP with a manufacturing value-added of not less than 40 per cent (<http://www.nv2020.org/?Iparameters>)

Interestingly, the Vision 2020 recognises the debilitating effect of brain drain in the actualisation of the Vision and incorporated the Nigerian Diaspora in the various arms of the institutional framework. The centrality of human capital in driving development plans and visions was underscored by Remi Omotoso thus; “human capital development is very key to achieving any goals that our New Vision Plan will set for the sustainable socio-economic and

political development of Nigeria” (cited in Oyebode 2008). The Report of the Vision 2020 National Technical Working Group on Human Development (2009:4) attributes the disconnect between recent development plans and visions such as SAP, NEEDS 1 and 2, Vision 2010 and the realisation of their broad goals and economic growth to the constraints arising from human capital challenges. That is, the non-attainment of proposed development goals was accentuated by the loss of relevant human capital to the developed countries through emigration.

Recognising the threat of brain drain to human capital formation in the country and its devastating effect on the pursuit of development, the Report of Vision 20-2020 National Technical Working Group (2009:26) avers that the strategy to ensure the availability of a pool of human capital would entail devising interventions that “train, engage, motivate and retain professionals in their chosen disciplines”. Oyebode (2008) has noted that going by the extent of brain drain and attendant human capital challenges in the country, the Vision 20-2020 might fall short of its laudable projections of: GDP US\$900 billion and per capita income of US\$4000 per annum and 13 percent annual growth anchored on investment profile of US\$40 billion per annum. This is in spite of the decision of the federal government to allocate ₦100 billion for human capital development. Oyebode (2008) describes this amount as “a mere drop in the bucket because of the deep-rooted rot in the system, as well as the mass exit of highly needed manpower in the university system to drive the human capital development.

The implication of the unfolding reality is the impossibility of autochthonous development that can take the country to the top 20 bracket as Vision 20-2020 has projected. There are two options to achieving the type of development encapsulated in Vision 20-2020: the immediate and total mobilisation of Nigerians in the diaspora outside the existing framework of trickle-down syndrome or the elongation of the timeframe of the vision to enable the training of new crop of professionals. In either of these options, the systemic negativities and contractions that spawned the ground for the post-SAP massive emigration must be addressed.

#### 5.4: LEGISLATIVE AND INSTITUTIONAL FRAMEWORKS FOR DIASPORA ENGAGEMENT IN NIGERIA

Prior to the formulation of the various national policies on migration, Nigeria's policies on immigration and emigration depended on disparate laws that addressed various aspects of migration. The **Table 5.3:** below contains various legal instruments ranging from national laws to regional and international agreements and conventions in connection with migration, which Nigeria has ratified.

**Table 5.3: Sundry Legal Instruments for Migration in Nigeria**

<b>Legislative Instrument</b>	<b>Issues</b>	<b>Target</b>	<b>Remarks</b>
The 1999 Nigerian Constitution	Grundnorm of all laws pertaining to migration	Nigerians and foreigners	
Immigration Act (1963) (Chapter 171, Laws of the Federation of Nigeria, 1990)	Provides for the conditions for entry, stay and departure of foreign nationals to and fro Nigeria	Foreign nationals and Nigerians	The Act is under consideration for amendment in the National Assembly to comply regional and international laws.
Draft National Policy on Migration	General migration issues	Nigerians	Yet to be passed into law
Draft National Labour Migration Policy (NLMP)	Labour issues	Nigerian and foreign workers	Yet to be passed into law
Labour Act (Chapter 198, Laws of the Federation of Nigeria, 1990)	Guides labour policies concerning Nigerian and foreign workers.	Nigerians and foreign workers	
International Convention On The Protection Of The Rights Of All Migrant Workers And Members Of Their Families (Ratified by Nigeria in 2009)	Labour migration	International	
Trafficking in Persons (Prohibition) Law, Enforcement and Administrative Act No. 24 of 14 July 2003(Amended	Trafficking in persons. The 2005 Amendment extended the powers of NAPTIP to cover internal trafficking, exploitative	Nigerians and foreigners	

in 2005). (Sets up National Agency for the Prohibition of Trafficking in Persons and Other Related Matters (NAPTIP))	child labour and the forfeiture of assets and proceeds of convicted traffickers.		
Child Rights Act 2003	Prohibition of child labour; exploitation of children for begging and child trafficking	Nigerian child	
ECOWAS Protocol on Free Mobility of Persons, Goods and Services, May 1979	Phase I: Right of Entry and Abolition of Visa [Protocol A/P1/5/79]; (ii) Phase II: Right of Residence [Supplementary Protocol A/SP1/7/85]; (iii) Phase III: Right of Establishment [Supplementary Protocol A/ SP2/5/90] (B) Facilitating Measures: (i) ECOWAS Travel Certificate & ECOWAS Passport; (ii) Establishment of National Committees: on Free Movement of Persons & Vehicles, for example (iii) Introduction of Brown Card Motor Vehicle Insurance Scheme (iv) Establishment of ECO Bank	ECOWAS Region	Nigeria is the first country to introduce ECOWAS E-Passport; It set December 2010 phase-out Nigeria passport.
ECOWAS Common Approach on Migration, January 2008 at 33 <sup>rd</sup> Summit of Heads of State and Government of ECOWAS			

*(Adapted from Afolayan et al 2009; Afolayan 2010)*

Interestingly none of the legal instruments and agreement (both bilateral and multilateral) dealt with harnessing the diaspora for national development. No successive Nigerian government considered the brain drain phenomenon serious enough to evolve a

national policy to either stem its tide or integrate the Nigeria diaspora in the national development grid until recently. The earliest government effort was the promulgation of Constitution (Suspension and Modification) (Amendment) (No.3) Decree73 of 1992, which recognised dual citizenship. This provision was subsequently included in the 1999 Nigerian Constitution under chapter III, Sections 28 and 29. The decree amended Cap 62 of the Laws of the Federation of Nigeria (LFN) to allow dual nationality. The dual citizenship provision created flexibility in the relations between Nigerians in the diaspora and the country. As opined by Sekoni (2011), the dual citizenship policy strengthened relationship between Nigerians in the diaspora and their homeland communities and underpinned the current impressive remittance outlay. Between Babangida's dual citizenship policy and termination of military rule in 1999, no policy was enunciated with respect to the massive emigration of Nigerians or how to involve the diaspora in national development. In a way, it could be argued that the collapse of the Nigerian middle class, and the subsequent emigration of members of this class, provided the needed breathing space for the illegitimate military regimes to worry less about their legitimacy problem and continue with their arbitrary rule. This position is strengthened by government's inaction in the face of burgeoning number of Nigerian asylum seekers and refugees all over the developed countries. Of course, government could not be expected do much as they were fleeing from unfavourable government policies especially, the abridgement of their fundamental human rights. The period under the late General Sani Abacha (1993-1998) appeared to have exacerbated the push factors for emigration. Under Abacha's regime, the army hounded the press, suppressed academic freedom, killed political opponents and imprisoned those antagonistic to its dominant interests (Hagher 2011:122). The Nigerian diaspora not only provided logistic support to end military rule, but became the underground railroad for mass migration (Hagher 2011:122).

The Nigerian government's interest in the diaspora as agents of development was ignited by several factors. One was the example of diaspora influence and development impact in such countries as China, Mexico, India, Philippines and so on. Two was the effect of years of Nigeria's designation as a pariah nation and the need for reintegration. Three was the reluctance of the Western business interests to invest in Nigeria as a result of negative rating by rating institutions. And finally, the ubiquity of Nigerians around the world and their seeming influence in their host countries. In actuality, the conscious recognition of the diaspora as a veritable resource for national development, and official efforts to tap into them for the benefit of the country, started with former President Obasanjo in 1999. Before then,

available institutional frameworks concerned themselves with general migration management issues, internal displacement and refugee issues. **Table 5.4** below contains the various institutional actors in diaspora management in Nigeria. Each institution is involved in diaspora issues to the extent of responsibilities assigned to it by its enabling laws.

**Table 5.4: Specific Institutional Frameworks for Diaspora Engagement in Nigeria**

S/No	Institution	Objectives
1	Nigerians in the Diaspora Organisation (NIDO)	<ul style="list-style-type: none"> <li>- Encourage the participation of Nigerians in Diaspora in the affairs of the country;</li> <li>- Provide a forum to organisations for the exchange of views and experience;</li> <li>- Through Networking, enhance the image of Nigeria in all its ramifications;</li> <li>- Partner with Nigerian stakeholders in pursuance of national development;</li> <li>- Build a database of Nigerians with professional skills and make such database available for the benefit of government, the private sector and Nigeria’s partners.</li> </ul>
2	Nigeria National Volunteer Services (NNVS)	<ul style="list-style-type: none"> <li>- In addition to building a culture of volunteerism and harnessing abundant human resources at home and in the diaspora towards national development, the NNVS was mandated, among others: <ul style="list-style-type: none"> <li>• to act as the national focal point and liaison with NIDO, especially for the fulfillment of its objectives;</li> <li>• tap into the huge reservoir of skills, knowledge and experiences of Nigerians who live abroad for national development;</li> <li>• utilize the skills, knowledge and experiences of Nigerians living in Nigeria who, during their career in the private sector or after retirement from the public service are willing and able to offer their services in volunteer work;</li> <li>• provide and impart special skills that are required and not available at certain levels of government or private sector;</li> <li>• provide experienced staff to local Government Councils in the fields of</li> </ul> </li> </ul>

		<p>administration, bookkeeping, accountancy and other areas of specialization;</p> <ul style="list-style-type: none"> <li>• mobilize specialized skills and channel such skills towards the needs, objectives and programmes of recipient organizations; and</li> <li>• strengthen the capacity of local communities and community based organizations.</li> </ul>
3	Office of the Senior Special Assistant to the President on Diaspora Affairs	<ul style="list-style-type: none"> <li>- Serves as a two-way communication channel between Nigerians in Diaspora and the government of Nigeria;</li> <li>- Coordinate the activities of various institutions involved in migration and diaspora affairs;</li> <li>- Reports to the president on diaspora issues</li> </ul>
4	House Committee on Diaspora Affairs (House of Representatives)	<ul style="list-style-type: none"> <li>- To promote the exchange of ideas between home country and Nigerians in the Diaspora;</li> <li>- To collect and maintain data on Nigerians in Diaspora from Consulates, Ministries of Foreign Affairs, Education, Justice, the Population Registers, Censuses, Employment Agencies and Statistics divisions of International Organizations and International Census Bureau for Domestic Planning and Uses;</li> <li>- To initiate policies needed to recognize and harness the potentials of Nigerians in the Diaspora in support of development and growth in both home and host countries;</li> <li>- To encourage and monitor Diaspora networks and organizations and assist in the realization of their agenda and promote institutional change to help public servants collaborate effectively with Diaspora representatives;</li> <li>- To participate in dialogues within Government, regional and local authorities on Diaspora matters in their home and host countries.</li> </ul>
5	National Universities Commission (NUC)	<p>Sets up the Linkages with Experts and Academics in the Diaspora Scheme (LEADS). The major aims of the LEADS are:</p> <ul style="list-style-type: none"> <li>- To attract experts and academics of Nigerian extraction in the Diaspora on short term basis to contribute to the enhancement of education in the Nigerian University System;</li> <li>- To create appropriate engagement-positions and job satisfaction for Nigerian academics and experts, so that they are not attracted away or wasted internally;</li> <li>- To encourage healthy staff movements, interaction and collaboration across and between Nigerian Universities and other sector of education and National development;</li> </ul>

		<ul style="list-style-type: none"> <li>- Among other benefits, to encourage experts in industry to participate in teaching and research in Nigerian Universities.</li> </ul>
	Federal Ministry of Science and Technology	<ul style="list-style-type: none"> <li>- Annual Science and Technology Week;</li> <li>- African University of Science and Technology Abuja;</li> <li>- Technology Village</li> </ul>
7	Diplomatic Missions	<ul style="list-style-type: none"> <li>- Render sundry services to the diaspora especially the renewal of their travel documents.</li> </ul>
8	Vision 20: 2020	<ul style="list-style-type: none"> <li>- Mobilise and sensitise Nigerians in the Diaspora to participate in nation-building;</li> <li>- Measures to check and reverse brain drain and foster brain gain: <ul style="list-style-type: none"> <li>– provide adequate, well-paying jobs to serve as an incentive</li> <li>– expedite action on the Local Content Bill in the petroleum industry, in order to create adequate opportunities for all citizens</li> <li>– improve infrastructure, ensure political stability, as well as security of lives and property</li> <li>– control emigration of highly skilled personnel for the purpose of knowledge transfer for brain gain</li> </ul> </li> </ul>
9	Labour Migration Desk (LMD)(Established in 2006) and National Electronic Labour Exchange (NELEX) (Federal Ministry of Labour and Productivity)	<p>The basic functions envisaged, for the LMD are:</p> <ul style="list-style-type: none"> <li>- To work towards providing cogent advice on the formulation of coherent, comprehensive, consistent and transparent policies and procedures to effectively manage labour emigration and immigration in Nigeria;</li> <li>- Ensuring coherence between labour migration, employment and other national policies, in recognition of the wide social and economic implications of labour migration and in order to promote full, productive and freely chosen employment;</li> </ul> <p>Establishing mechanisms to ensure co-ordination and consultation among different line departments of the Government of Nigeria involved in the process of labour migration;</p> <ul style="list-style-type: none"> <li>- To undertake and/or contract, analysis of the national labour market in order to detect, assess and predict labour shortages, at the national level, for both skilled and less-skilled employment and establish whether labour migration can provide a solution;</li> <li>- Taking initiatives in developing procedures for a</li> </ul>

		<p>wide-ranging dialogue and cooperation on labour migration issues and policies in consultation with social partners, civil society and migrant worker organisations;</p> <ul style="list-style-type: none"> <li>- Providing assistance to projects and programmes generating, or increasing, opportunities for decent work for women and men migrants and liaising with donor agencies and governments;</li> <li>- Developing and supporting the implementation of initiatives that create productive employment and decent work for all migrant workers guided by international labour standards and other relevant international instruments and multilateral agreements concerning migrant workers;</li> <li>- Monitoring and evaluating the Private Employment Agencies through appropriate regulatory frameworks;</li> <li>- Ensuring that effective enforcement mechanisms for the protection of migrant workers' human rights are in place and providing training on human rights to all involved in migration through awareness raising campaigns; and</li> <li>- Providing the Minister and the Permanent Secretary of the Federal Ministry of Labour and Productivity, who have key roles to play in the articulation of migration policy, with briefs on the management and administration of labour migration to ensure that migration is taken into account along with the larger labour and employment policy considerations.</li> </ul>
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In the course of Obasanjo's foreign trips, he encountered the Nigerian diaspora and initiated presidential dialogues with them. The series of dialogue was possible because they had already been organising themselves in groups through home town associations (HTAs), professional and interest groups and ethnic associations (Hernandez-Coss and Bun 2007:10-11). The presidential dialogue achieved two objectives: one, it broadened the horizon of diaspora engagement in national development; and two, it officially acknowledged the potential relevance of the diaspora in national development. As De Haas (2006:17) points out "it is not so much the engagement of Diaspora groups that is new, but rather the interest of the Nigerian government in their political contribution to national development". Following the Nigerian government's interest in mainstreaming the diaspora into national development,

further discussions led to the formation of supranational diaspora organisations. The essence of the presidential dialogue and the decision to aggregate diaspora assets under an umbrella was to streamline and focus them toward the greater needs of national development.

The organisation of Nigerians in the diaspora, prior to this period, lacked coherence as the arena was filled with thousands of community, professional, religious, ethnic and cultural organisations jostling for space and domination like children in “a disjointed polygamous family” (Nweke 2010). The “discovery” of the Nigerian diaspora by the Obasanjo government led to several important developments. Firstly, before now, the Nigerian Diaspora had been sending remittances, but mainly informally. Government was to totally blank on diaspora remittance portfolio as the CBN Annual Reports did not keep a tab on, or reflect, the actual volume of formally remitted funds or projected an estimate of informal volume of remittances. This omission was in sync with general government indifference to migration issues, especially the “gain’ aspect of the brain drain phenomenon. It was only in 2002 that CBN began to document remittances. This led Nigerian banks to broaden their service base by acting as agents to global MTOs especially, the Western Union, and MoneyGram. Although the transaction cost of sending remittances was comparably high due to infrastructural incapacity, and exclusive agreements between Nigerian banks and MTOs, many Nigerians in the diaspora began to increasingly embrace formal channels to remit money. This was demonstrated by the astronomical increment in the recorded remittance inflows to Nigeria by the CBN. Remittances rose from US\$2.3 billion in 2004 to US\$ 17.9 billion in 2007, and since then, the CBN has sharpened extant policies on collection and reportage of remittance inflows in the country (Afolayan et al 2009:16).

Secondly, following the series of dialogues entered into by the presidency and various groups of Nigerians in the diaspora, an umbrella organisation known as Nigerians in the Diaspora Organisation (NIDO) was established in 2000 with initial branches across Europe, the United States and Canada, but has now expanded to Asia and Africa. NIDO serves as a platform for the mobilisation of all Nigerians in the diaspora, especially professionals. NIDO was originally under the supervision of the Permanent Secretary of the Ministry of Foreign Affairs. But it was later moved to the office of the president with an administrative secretariat. The reasons for the change in the institutional supervision of NIDO and its operational modalities could be a product of three factors: one, government’s positive reappraisal of its strategic importance as an engine of foreign investment mobilisation; two, to shield it from unnecessary politics and politicisation; and three, to extricate it from the bureaucratic bottlenecks of the Nigerian civil service, which could undermine its

effectiveness. Apart from serving as a platform for global mobilisation, the Nigeria government intended that “NIDO will facilitate a systematic and institutionalized relationship between Nigeria and its Diaspora and be a focal point in the overall strategy of involving the Diaspora in national development in the fields of education, science and technology, investment and culture and tourism” (African Diaspora Policy Centre 2011:9).

Thirdly, the President also strengthened the administration of Diaspora affairs with the creation and appointment of a Special Assistant on Diaspora Affairs. The Special Assistant oversees every issues pertaining to the Diaspora. As explained by the Senior Special Assistant to the President on Diaspora Affairs, Mrs Bianca Ojukwu:

The high commissions/embassies are the primary interface of the government of Nigeria with her citizens in the countries in which they are based. Each country has its own peculiar issue concerning Nigerians in the country... . My Office reports directly to Mr. President. We complement the laudable services offered by our embassies and will also complement the work of the Diaspora Commission [when it is created]. Because of the critical importance Mr. President places on Nigerians in Diaspora, we are strategically resourced to ensure [that] his objectives on matters relating to Nigerians in Diaspora are carried out. My Office will also step in to fill gaps left by other bodies because of one reason or the other (CANUK Newsletter 2011:6).

Fourthly, another institution set up to engage the diaspora is the Nigeria National Volunteer Service (NNVS). It was established in 2003 to reinforce bonds with the Nigerian Diaspora through volunteerism. The NNVS is under the direction of the Office of the Secretary to the Government of the Federation (OSGF) and its branches are spread in 36 states of Nigeria. The aims of NNVS include: mobilising and harnessing the skills and experiences of the diaspora for national development through such strategies as capacity building temporary visits, technical missions and sabbaticals to Nigerian institutions (De Haas 2006:17; African Diaspora Policy centre 2011: 9).

Fifthly, apart from the executive arm of government, the legislative arm is also proactively involved in diasporan affairs. Nigeria’s House of Representatives established a standing Committee on Diaspora Affairs as part of the national efforts to mobilise the Nigerian diaspora for nation-building. The key functions of the Committee include: putting diaspora issues in the front burner of national discourse; initiating policies and setting agenda for the effective harnessing of the potentials of Nigerian diaspora; intervening in issues

concerning the diaspora through the appropriate agencies; and, overseeing the implementation of government policies concerning the diaspora. The achievements of the Committee, since its establishment in the sixth legislative assembly, according to its Chairman, Hon. Abike Dabiri-Erewa, include among others: the successful intervention in human rights cases involving Nigerian diaspora in Libya, Indonesia and China; and the proposal of a bill seeking to put in place a legal framework for the establishment of Nigerian Diaspora Commission (<http://www.voteabikedabiri.com/feat.php?page=accomplishment>).

The recent attempt at evolving a legislation aimed specifically at addressing issues relating to the Nigerian Diaspora is the proposal of a bill called “Nigerians in Diaspora (Establishment) Commission Bill” in 2009. The bill, according to its explanatory memorandum, seeks to establish a commission to:

Provide for the engagement of Nigerians in diaspora in the policies, projects and participation in the development of Nigeria and for the purpose of utilising the human, capital and material resources of Nigerians in diaspora towards the overall socioeconomic, cultural and political development of Nigeria (<http://www.diasporacommittee.com/nigeria-diaspora-bill.pdf>).

The proposal for the establishment of Nigerian Diaspora Commission has been as a subject of controversy. Its major criticism is its perception as mere duplication of functions. In a stakeholders’ meeting in Abuja in March 2010, the Nigeria’s National Planning Commission, through its Secretary Dr Sylvester Mony, considered the proposal to set up a Diaspora Commission as a needless duplication of bureaucracy and another drain pipe for the country’s scarce resources. He was quoted to have argued that:

We have the infrastructure, the network and therefore, whatever it takes to harmonize the Nigerians in the Diaspora. I don’t see how the proposed Commission can function outside the Ministry of Foreign Affairs. What we need is to strengthen or create a department in the Ministry to provide excellent service to them (Akogun 2010).

There is also a groundswell of support for the bill and its proposal for the establishment of a Diaspora Commission but the apprehension is that the Commission might eclipse and undermine the novelty of NIDO and its acclaimed ingenuity in harnessing the Diaspora (Nweke 2010). There is the contention that the Ministry of Foreign Affairs and Nigeria Embassies are inappropriate to be saddled with diasporan affairs. This argument is anchored

the well-known inefficiency and graft scandals associated with them. It is believed that their involvement would undermine efforts at mobilising the diaspora and effectively lead to reversals in diaspora issues (Akogun 2010). The bill has, so far, remained in the works and has not been passed into law. Undoubtedly, there is need to set up a diaspora commission as a strategy to ensure an enduring institutional framework to harness the diaspora, whose skills are imperatively relevant to Nigeria's socio-economic and political development.

Sixthly, in 2007 the National Universities Commission (NUC) set up a programme to harness Nigerian academics abroad. The initiative, called the Linkages with Experts and Academics in the Diaspora Scheme (LEADS), is a programme that specifically aims at utilising the skills and expertise of Nigerians in the Diaspora to engender positive transformation and instil international best practices in the higher education sector. LEADS targets seven areas namely: Information and Communications Technology (ICT); Management Science and Business Administration; Mathematics; Medicine and Dentistry, Mining Engineering, Natural Sciences and Oil and Gas Engineering. LEADS is designed to suit prospective visiting experts and academics as it is divided into three tranches of 3, 6 and 12 months. The major objectives of LEADS as set out by the NUC include:

- a) To attract experts and academics of Nigeria extraction in the Diaspora on short term basis to contribute to the enhancement of education in the Nigerian University System;
- b) To create appropriate engagement-position and job satisfaction for Nigerian academics and experts, so that they are not attracted away or wasted internally;
- c) To encourage healthy staff movements, interaction and collaboration across and between Nigerian Universities using these experts and academics in the Diaspora and other sectors of education and national development; and,
- d) To encourage experts in industry to participate in teaching and research in Nigerian universities (<http://www.nuc.edu.ng/pages/pages.asp?id=54>)

Since the establishment of LEADS, about 19 scholars have participated and rendered services to various Nigerian Universities. The NUC has spent about ₦ 23.5million so far on the scheme and has recorded impressive results, which include the attraction of Nigerian experts and academics in the Diaspora back home and subsequent relocation of some of them; enrichment of curriculum review process in accordance with global best practices; the enhancement of reunion and reintegration of experts to their heritage and community life; the

enhancement of skills acquisition in rare areas of expertise especially in the installation and operation of hi-tech gadgets amongst others (<http://www.nuc.edu.ng/pages/pages.asp?id=54>).

Finally, the Federal Ministry of Science and Technology instituted Annual Science and Technology Conference in 2005 as a window onto the Diaspora. The Conference is primarily designed as a forum for Nigerians in the Diaspora and those at home to map out modalities for collaboration for national development (Akwani 2007). Apart from describing the Conference as an important first step towards the national objective of mainstreaming the Diaspora into national development, the then Nigeria President Olusegun Obasanjo declared 25 July every year as the Diaspora Day. Thus, Science and Technology Conference has become institutionalised as an integral part of the Diaspora Day. Since 2006, Nigeria has been celebrating the Diaspora Day on July 25 in addition to Science and Technology Conference with some tangible results. Apart from the establishment of personal and institutional linkages between scientists and technologists abroad and at home, diaspora scientists have gained access to local research funds through the Science and Technology Trust Fund (Akwani 2007). The conference also facilitated research and development in identified areas, an example being Dr. Obaija's project, which produced a drug for the management of arthritis (Akwani 2007).

Additional positive fallout from the Science and Technology Conferences was the Nigerian government's initiative to set up African University of Science and Technology in Abuja in 2007. The main objective of this institution is to be a Pan-African centre of excellence as well as a citadel for the training of the next generation of engineers and scientists to drive Africa's development. The University is modelled to create an extensive network within the African scientific community working in the best universities across the world and to tap their pool of knowledge to execute its programmes (African Diaspora Policy Centre 2011:13). What is not clear is the modalities put in place to stop the new institution from being a feeder-zone for the manpower needs of the developed countries like other Nigerian universities.

The various Nigerian Ministries, Parastatals, and Agencies as well as state governments are involved in diaspora affairs, in relation to their mandates. For instance, in the 2006 Science and Technology Conference, the NNVS and the Federal Ministry of Health on the one hand and the Medical Association of Nigerian Scientists and GPs in the British Isles (MANSAG) and the Association of Nigerian Physicians in America (ANPA) signed a memorandum of understanding in connection with facilitating medical missions to Nigeria (Akwani 2007). Despite the achievements recorded so far in the quest to integrate the

diaspora in national development, more needs to be done to perfect a seamless diaspora engagement.

## **5.5 THE NIGERIAN DIASPORA AND THE DILEMMA OF INTEGRATION**

The Nigerian governments' policies towards mainstreaming the Diaspora into national development are undoubtedly good. Their value lies in their pragmatism, which consists of cutting national losses associated with brain drain through employing available free brains in national development programmes, encouraging remittances in lieu of reverse-migration and converting the diasporans into citizen-diplomats for the purpose of laundering the country's image abroad and attracting foreign investors.

Diaspora integration into national economies is not a simple issue of patriotism. It is much more complex than that. Citizens of a country do not just emigrate. Certain domestic and international factors singly or collectively interact to induce their emigration. These factors already categorised in this study as push, pull, suction and systematic factors, must be substantially addressed, if meaningful diaspora engagement must be facilitated and enthroned. Having emigrated, the integration of immigrants in most host countries is always so complete that dislocation for the purpose of reverse-migration is always a tough decision. Even where decisions to return to home country is reached, re-integration is not so straightforward considering problems of adaptation, and clash of ambitions between the local experts and their diaspora counterparts, which creates certain rigidities that undermine the purposes of diasporan engagement.

Several dilemmas appear to characterise the processes of integration of the diaspora into national economies. It is not just enough to desire or decree policies into being for the purpose of mainstreaming diasporas into the national development grid. There are certain domestic, external and personal dilemmas that confront diaspora integration. These must be captured and addressed by national policies to facilitate meaningful diasporan engagement necessary to kindle their interest and ensure seamless integration.

Domestic dilemma consists of the capacity of the national economy to absorb all the diaspora which it believes would contribute to its development. In Nigeria, the domestic conditions that induced emigration have remained largely unresolved. The state of the Nigerian economy is still parlous suggesting that it might not likely be able to meaningfully accommodate its diaspora. In other words, while the Nigerian economy has remained

inelastic in terms of available opportunities, the pool of diaspora's expertise and knowledge is elastic, which suggests weak absorptive capacity on the part of Nigerian economy. Both national and global mappings of Nigerian diaspora experts and a net total estimate place Nigerian migrant stock in millions. Does Nigeria have the capacity to re-absorb the million of its experts and professionals who are gainfully employed in African and Western countries? If the answer is negative, which is most likely, then, what proportion of them could be accommodated by the Nigerian economy? The question of domestic incapacity combines with the problems of appropriate modalities to shortlist and chose diaspora experts and skilled personnel to create a serious dilemma.

Another dilemma within the domestic milieu is the mechanism for determining areas of specialisation necessary for national development. The hierarchization of spheres of expertise and the attachment of national importance to them is likely to create feelings of marginalisation within the diaspora. There appears to be patent contradiction in the overall programme of diaspora engagement in Nigeria. Akwani (2007) argues that the formation of umbrella organisations such as NIDO and NNVS was a strategy to turn brain drain into brain gain without requiring the diaspora to physically relocate back to Nigeria. But the question is: if Nigerians in the diaspora do not return home, how would they contribute to national development outside the traditional remittance regime that had been their means of contributing to national development?

Many Nigerians in the diaspora have tended to see their classification as diasporans negatively. According to Hagher (2011:119) such Nigerians feel that a Nigerian government initiative that considers them as the "Diaspora" actually severs, disenfranchises and disinherits them. This mindset made many Nigerians to refuse to identify with NIDO or participate in building the Nigerian diaspora database.

Part of the national dilemma in diaspora integration consists of the disconnect between expectations and reality. Although the diasporas are assumed to understand the shortcomings of their countries of origin, their long absence and adaptation to the efficiency of their host countries create dilemma of adaptation. Emeagwali (2009) captures it succinctly thus:

I long to visit the motherland, but I must confess that when Africa called me to return home, I couldn't answer that call. The reason is that I work on creating new knowledge that could be used to redesign super computers. The most powerful supercomputer cost \$120 million each and Nigeria could not afford to buy one for me. I created the knowledge that the

power of thousands of processors can be harnessed; this knowledge in turn inspired the reinvention of vector supercomputers into massively parallel supercomputers. New knowledge must precede new technological products and the supercomputer of today will become the personal computer of tomorrow.

The import of Emeagwali's assertion is that certain category of diaspora experts lacks the liberty of national patriotism, no matter the extent of their love for their country, as their contributions to development are global and beyond borders. The challenges of national security and inadequate domestic framework for fruitful engagement create re-integration dilemma.

At the individual level, several dilemmas haunt the diaspora. While the moral argument for the individual professional to return home might be strong, the economic sacrifice required of him might be difficult to make. Patriotism also has economic underpinnings and is best served on a full stomach. Patriotism may not likely win in a duel between personal quest for economic wellbeing and national call to duty if it is anchored on a near-empty stomach and atmosphere of economic uncertainty. It might be a case of stretching patriotism too far to expect a Nigerian professional earning US \$200,000 per annum to resign his appointment and accept a job offer in Nigeria that pays US \$50,000 year.

This problem came up between 2003 and 2007 during the regime of Obasanjo. President Obasanjo went to a considerable trouble to attract the duo of Dr. Ngozi Okonjo-Iweala of the World Bank and Chief Olu Adeniji of the United Nations into his cabinet as the Ministers of Finance and Foreign Affairs respectively. At that time Dr. Okonjo-Iweala grossed a yearly salary of US \$262,200 at the World Bank and Chief Adeniji received a salary of US \$186,252 per annum at the United Nations (Ajayi 2004). But the salary prescribed and approved for federal government Ministers as contained in the *Certain Political, Public and Judicial Office Holders (Salaries and Allowances etc) Act No.6 of 2002* was ₦794, 085.00, which was a far cry from the salaries of top-notch technocrats in international organisations. Appeal to patriotism seemed inadequate to attract these international technocrats. What Obasanjo did was that he negotiated their salaries slightly downward and circumvented the law by denominating their salaries in dollars and bringing in the UNDP to pay up the difference between the legally approved ₦794, 085.00 and their dollar-denominated salaries (La Olu 2011). Thus the federal government paid Dr. Okonjo-Iweala US \$241,000 (₦38 million) per annum and Chief Adeniji US \$120,000 (₦17million) representing a sacrifice of US \$15,200 and US \$66,252 per annum respectively. However,

Nigeria's Court of Appeal in a ruling on the matter, which was brought before it by the late Chief Gani Fawehinmi (SAN), not only declared dollar-denominated salaries in Nigeria illegal, but also ordered the duo of Dr. Okonjo Iweala and Chief Adeniji to refund the sum of ₦205 million naira representing excess money accruing from the salaries paid to them in dollars (Nwankwo 2007).

Another example is the NUC's LEADS. Since its commencement in 2007, the programme has only attracted 19 scholars. And yet millions of Nigerian scholars are all over the world. A major reason for the low response rate is locatable in the conditions of service. In 2007 when the programme started, it made provision for a stipend of US \$1,750 per month. Currently, the stipend is US \$2,500 per month (<http://www.nuc.edu.ng/pages/pages.asp?id=54>). Another reason could be the decrepit socio-economic infrastructure and the security challenges in the country which tend to diminish life expectancy. Another reason could be the absence of insurance policy especially in the face of the peculiar dangers that confront returnee-diaspora as a result of the perception of criminals that they are loaded with hard currencies.

Nigeria's constitutional provision for dual nationality, which was originally contemplated to resolve citizenship dilemma, has exacerbated it. Most Nigerians appear ambivalent about where their primary citizenship obligation resides, the host country where they and their children are citizens or their home countries. Often, the country which the migrant has real connection with is the host country. The seeming indifference of the Nigerian state to the plight of its citizens abroad and the attention and protection which their adopted countries showers on them have intensified the dilemma of many Nigerians in the diaspora and alienated them from answering the clarion call to contribute to Nigeria's development. Eze (2007:37) paints a picture that underlies this dilemma thus:

The "Nigerian Community" had organized a dinner for us. In the course of the evening, I got into a discussion with a "Nigerian"... . The discussion bordered on development issue and the role of big powers like the U S in it. As the discussion evolved, it became clear that we were not on the same wave length. This made me to ask him the question, "when you say we, who do you refer to? His answer was sharp and swift – America!

The person under reference is a Nigerian by birth but mentally, he perceives himself primarily as an American and secondarily as a Nigerian. The Euro-American patriotism exhibited by Nigerians is understandable within the framework of proactive state actions to

protect them anywhere in the world. And their measured patriotism towards Nigeria is underpinned by its seeming ineptitude in meeting the expectations of its citizens. As Eze (2009:37) contends,

If they [Nigerian-born American citizens] were to come to Nigeria and were to suffer some wrong, despite their Nigerian nationality, the USA seems to have the right of diplomatic protection but when the wrong is suffered in their country USA, Nigeria cannot come from her second position to displace the nationality of his first choice.

This hierarchization of citizenship and the absence of a viable diaspora policy have combined to downgrade the relevance of Nigeria in the consciousness of its diasporans and deepen the ambivalence of reverse-migration. The impression which the national effort at diaspora integration creates is that Nigeria is selectively interested in the virile, healthy, young skilled professionals. There does not appear to be any contemplation of disadvantaged diasporans that could be assisted to return home. This is so because the mindset of policy makers and other stakeholders about diaspora is that they are a privileged class of affluent people. But this picture is utopian and unrepresentative of the reality. So many Nigerians in the affluent societies are trapped in the mire of destitution and are at a crossroads due medical afflictions or other gerontocratic factors.

The turn of events in the lives of many Nigerians in the diaspora has circumscribed their capacity to relocate home. Apart from the constraints of naturalisation in their host countries and occupation of very high positions in corporate and government circles, most Nigerians are tied up nuptially with foreign wives. The cultural differences, the long period of domiciliation in the host country, the children's educational programmes and the wives' careers combine to act as restraining factors and deepen the migrant's dilemma of returning to home country. Emeagwali's personal experience, which appears to be representative of the experiences of many Nigerian diaspora captures the dilemma, "first, I have an American wife that has her academic career and an eight-year son that is in a good school. It will be inconsiderate of me to disrupt my wife's career and my son's education [just to return home]" (<http://emeagwali.com/interviews/brain-drain/education-in-africa-brain-drain-problem-worldnet-africa-journal.html>).

So many Nigerians in the diaspora are underemployed, underutilized and frustrated, leading to what Adebayo (2010: 10) designated as "brain death", a situation where a professional is forced into an employment that is not just below their qualifications but incongruent with their areas of specialisation. Significant number of African professionals,

such as engineers, accountants, and lawyers, end up becoming de-skilled as they are trapped in such unskilled jobs as driving taxis or performing poorly paid manual jobs in working conditions that are far from congenial. According to Adebayo (2010:10), many Nigerians are in this category as “many of the taxi drivers who service the Atlanta airport hold higher degrees, and there could be Ph.D. degree holders among them”. The increasing high currency of migration in Nigeria and the generally erroneous and misleading perception that migration automatically translates to affluence have created the mentality of desperation amongst potential young migrants. The desperation often translates into taking very dangerous routes through the deserts, stowing away in ships, filing for asylum and presenting themselves as refugees. The optimism of emigration have often turned to despondency as migrants confront reality. As Hagher (2011:128) asserts:

Nigerians in the diaspora have often arrived in their host communities to face the grim reality of underemployment, unemployment, low wages, high cost of living, and in certain countries, they live among high risk crime environments. This kind of environment is not conducive to domestic stability.

Most migrants never succeeded in surmounting these hurdles. In most cases, many migrants were swallowed by them with no escape route. In concrete terms, there are migrants who have reached points of no return: they are between the deep blue sea and the devil and therefore at a crossroads, unable to help themselves not to talk of contributing to home-country development. Added to this is the crisis of family life and domestic instability. The pro-female laws in most developed countries and high divorce settlement costs have put many migrants in a very vulnerable financial position and foreclosed their capacity to answer national call to duty (Hagher 2011:128).

The cultural freedom and permissiveness in many advanced economies, where many diasporans live, conflict with the cultural orientation and sensibilities in Nigeria. Many Nigerians in the diaspora have been sucked into the eddy of the so-called cultural freedom and trapped therein. Some have embraced hard drugs and such behavioural patterns and preferences that are considered anti-social in Nigeria but condoned and accepted in developed economies, such as homosexuality. As the Nigerian Minister of Information, Mr Labaran Maku opined, “between Europe, America and Africa there is a huge culture gap. Some of the things that are considered fundamental rights abroad also can be very offensive to African culture and tradition and to the way we live our lives here” (cited in Forbes 2011). While homosexuality in Nigeria is a “hush-hush” affair and practised in absolute secrecy, it is a

matter of human rights to be celebrated in developed economies (Hagher 2011:135). Recently, the Nigerian Senate passed a bill, which not only criminalises homosexuality in Nigeria, but also imposes stiff penalties ranging from 10-14-year jail terms for gays and their accomplices (Agbons 2011; Purefoy and Karimi 2011). Interestingly, the bill elicited Western condemnation and threats to stop aid to Nigeria. But the morality of the bill appears to outweigh the economic threats from Britain, US and other western countries as the Nigerian Senate rebuffed the Western pressure amidst popular support for the bill (Forbes 2011). Nigerians in the diaspora caught in this cultural crossroads are unlikely to contemplate reverse-migration.

National programmes to attract the diaspora must factor the international mood in its formulation and implementation. Certain factors underpin the international trajectory of labour. Many developed countries' migration policies are driven by demographic factors, challenges from emerging economies and the need to maintain their scientific and technological lead. High life expectancy and low birth rate have engendered inexorable march to gerontocratic societies in developed economies. Quoting the United Nations Population Division sources, Newland (2004:188) informs that Europe's population declined from 728 million in 2000 to 726 million in 2003 and is projected to continue to decline to 632 million in 2050. As the population is declining, it is also ageing. Although the world's population is ageing, the developed countries' populations age more rapidly because of low birth rate as a result of reduced fertility. According to United Nations (2010:31), "the median of the world population was, on average, 28.0 years in 2005, having climbed 4.3 years since 1985. It is projected to climb further to 32.7 years in 2025 and 38.6 in 2050". But the pace of ageing in the developed countries is very fast and has serious consequences economically, politically, socially and culturally. The combination of declining and ageing population created the urgent need for alternative sources of labour to cushion the effect of labour shortages and surging demand for services in many sectors especially healthcare and domestic work (Newland 2004:188).

**Table 5.5: Median Age for the World by Development Group, and Major Area, Selected Years**

<b>Development Group or Major Area</b>	<b>1950</b>	<b>1985</b>	<b>2005</b>	<b>2025</b>	<b>2050</b>
World	23.9	23.7	28.0	32.7	38.1
More developed regions	29.0	33.2	38.6	43.0	45.7
Less developed regions	21.5	20.9	25.5	30.8	36.9
Least developed countries	19.5	17.7	19.0	22.1	27.9
Other less developed countries	21.8	21.4	26.6	32.7	39.4
Africa	19.1	17.4	19.0	22.1	28.0
Asia	22.2	22.2	27.6	33.6	40.2
Europe	29.7	33.7	38.9	44.2	47.3
Latin America and the Caribbean	20.0	20.9	26.0	32.5	40.1
Northern America	29.8	31.4	36.3	38.7	41.5
Oceania	28.0	27.7	32.3	36.2	40.0

Source: United Nations 2010:32

**Table 5.5** above shows the projected mean age across development regions. The population of the developed countries will continuously age as a result of several factors, especially high life expectancy, low fertility rate and low birth rate. Ageing population poses serious consequences to their development, hence their immigration policies which are aimed at addressing the shortfalls. **Table 5.6** below shows countries whose populations are expected to decline. Africa is not included because of its youthful population, high fertility rate and high birth rate in the face of global efforts to reduce infant mortality. The traditional immigration countries like the United States, Australia, Canada and New Zealand are not on the list because of their proactive immigration policies that aim to bridge manpower shortfalls in their domestic economies.

**Table 5.6: Countries and Areas Whose Population is Expected to Decline between 2000 and 2050**

Asia	Western Europe	Countries Under Transition Economies	Americas
Japan Hong Kong SAR	Austria Belgium Denmark Finland Germany Greece Italy Netherlands Poland Portugal Spain Sweden Switzerland United Kingdom Yugoslavia	Belarus Bosnia and Herzegovina Bulgaria Croatia Czech Republic Estonia Hungary Latvia Lithuania Romania Russia Slovakia Slovenia Ukraine	Cuba

Source: United Nations Population Division. Adapted from IOM (<http://www.iom.int/jahia/Jahia/about-migration/developing-migration-policy/migration-demography/demographic-trends-realities/cache/offonce;jsessionid=F7CE950616A20EB6AA0462A4459519BC.worker02>).

A stop-gap strategy adopted by these countries is the “wholesale importation” of skilled manpower to fill the shortfall. This international pull factor and other push factors in Nigeria’s domestic setting induced many skilled Nigerians to migrate to these countries. Thus, there is hardly any major economy that Nigerians are not present in appreciable numbers. And they are ubiquitous in all the sectors of these economies – medical, building, sports, business, engineering, maritime and information and communication technology among others. The relevance of the Nigerian diaspora and the dependence of their host countries on their professional competencies appear to be near-absolute in some countries. According to Adebayo (2010:10), “no hospital would function in Atlanta area, or in any part

of the United States for that matter, without Nigerian healthcare workers: doctors, nurses, nurse aids, therapists, laboratory technicians etc”. Therefore, if the Nigerian diaspora were to leave most of their host countries, these countries’ development trajectory might be compromised to their disadvantage. Again, most Nigerians in the diaspora have worked their ways into top security positions in their host countries that their national allegiance is not only a matter of conjecture and therefore, doubtful but creates a dilemma of categorisation.

The dilemmas that face the diaspora have multiplier effects on the individual, the home and host countries and the international community. The assumption that the diaspora is there for the home country to mop up and transport back to the country may not be entirely sustainable considering the fluidity of citizenship, the major interests that motorise and sustain migration, the customisation of diasporan skills and expertise in accordance with the host country’s needs and the high stakes attached to premium skills and expertise embodied in the diaspora in the international domain. Every effective policy on reverse-migration must aim to replicate conditions in the developed countries or create something very close.

## **5.6 SYNTHESISING THE LESSONS FROM OTHER CLIMES IN DIASPORA ENGAGEMENT IN NATIONAL DEVELOPMENT**

The trend in the global stock of migrants has been upbeat in the last two decades. United Nations (2010:95) asserts,

Over a half century, the growth rate of net international migrants has increased faster than world population. Migrants are coming from more countries and large streams are more common. Crises of one sort or another are producing a large though not necessarily dominant share of net international migrants.

Contemporary global stock is estimated at between 214 and 215.8 million (IOM 2011:49; World Bank 2011:18). A most common feature of the global migrational trend is that every country is affected although differently. While some are net-recipients, others are net-exporters and yet others are caught in-between. For instance, there is concern in Canada about the brain drain of its human resources to the US, which De Voretz and Laryea (1998:23) describe as costly. This is despite that Canada is a traditional country of

immigration. The central preoccupation of states especially net-exporters of human capital is how to reverse the negative effects of brain drain associated with emigration. In other words, there have been conscious efforts on the part of countries with high incidence of emigration to cut their losses and bridge the negative effects of brain drain on their economies. Although the diaspora population of every country consists of an insignificant percentage, yet they constitute the core of the human capital vital for national development. This is so because emigration is driven by the national interest of destination countries and their immigration policies reflect it. And because the purpose of lowering the immigration barriers is to fill the shortfall in manpower needs of the countries, immigration policies of the developed countries tend to be selectively favourable to, and receptive of, certain categories of human capital. That is why traditional countries of immigration such as, Australia, U S, Canada and New Zealand are not included in the list of countries that would be plagued by manpower crisis in the face of ageing population.

**Table 5.7: Brain Gain Strategies**

<b>The Common Patterns in Brain Gain Strategies</b>	<b>The Uncommon Patterns in Brain Gain Strategies</b>
<ul style="list-style-type: none"> <li>- a reasonable levels of economic and political stability preceded successful brain gain strategies;</li> <li>- earlier investments in quality education and its linkage with the labour market needs often the case behind the success stories on brain gain;</li> <li>- governments’ recognition of and commitment to the role of diasporas in the national development processes;</li> <li>- the creation of a conducive enabling environment and designing specific policy and financial incentive packages as part of the strategies;</li> <li>- Expatriate Knowledge Networks share similar organisational and administrative structures – website and databases of expertise;</li> <li>- The knowledge networks have links with governmental structures and process;</li> </ul>	<ul style="list-style-type: none"> <li>- concentration of critical mass of expatriates in a particular sector and location (Indian and Chinese communities in Silicon Valley);</li> <li>- strong transnational community living simultaneously in two countries (Taiwan);</li> <li>- promotion of university-industry collaboration in R&amp;D (China);</li> <li>- Dual citizenship rights for Diaspora (Ghana) including the right to vote and the right to return and indefinite stay for Africans (including non-Ghanaians) in the Diaspora;</li> <li>- Open membership in knowledge networks for nationals other than country of origin (South Africa and Colombia); Building on relative advantage (software sector in India, hardware and semiconductors in China and the shift to value added software products in Taiwan);</li> <li>- Evolving national plans and making</li> </ul>

<ul style="list-style-type: none"> <li>- Addressing national insecurity;</li> <li>- Creating conducive investment climate (tax holidays, exemption etc);</li> <li>- Dismantling the spectre of corruption;</li> <li>- The removal of bureaucratic red tape that complexify business transactions;</li> <li>- Instituting a diaspora day.</li> </ul>	<p style="text-align: center;">the diaspora the cornerstone of its implementation;</p> <p style="text-align: center;">-</p>
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Source: Adapted partly from UNDP 2007:3

**Table 5.7** shows the various common and uncommon strategies which countries have adopted in their brain gain quest. Peculiarities of countries in terms domestic settings determine which set of strategies to adopt. Although the ensemble of push factors in most labour-exporting countries exhibit similarities, the hierarchization of their impact factor yields the inherent dissimilarities among countries. Migration has come to assume an intercessory role in mitigating the effects of overpopulation in such countries as India, Philippines and Mexico. According to the International Organisation for Migration (IOM), high fertility rate plus a decline in infant mortality generated a large population growth in their working age bracket ([http://www.rcmvs.org/documents/IOM\\_EMM/v2/v2s02\\_CM.pdf](http://www.rcmvs.org/documents/IOM_EMM/v2/v2s02_CM.pdf)). So, migration has helped to reduce the likely pressure, which surplus working population would have mounted on these economies. But even at that, many developing countries have a surplus population that exceeds the capacities of their labour markets. For instance, the Philippines' stock of trained healthcare providers is more than its domestic healthcare system can absorb. At 418 nurses per 100,000 population, Philippines has more than it actually needs and thus is a major exporter of trained nurses to countries experiencing shortages, especially Saudi Arabia and United States ([http://www.rcmvs.org/documents/IOM\\_EMM/v2/v2s02\\_CM.pdf](http://www.rcmvs.org/documents/IOM_EMM/v2/v2s02_CM.pdf)). Despite the seeming mediatory role of migration in resolving sundry domestic contradictions in developing countries, brain drain, which is the necessary outcome of migration, has come to pose a significant challenge to their development prospects. This is so for three reasons: one, the manpower resources which emigrate are highly skilled professionals; two, development depends on this corps of professionals for conceptualisation, implementation and sustainability; and three, these human resources are unavailable to their home countries thus constraining the prospects of national development.

The contemporary emphasis on human capital as the most important factor of production underpins the various policies formulated and implemented by countries to

reverse brain drain. For sure, human capital facilitates innovation and thus spawns higher productivity. As Bergheim (2005:5) contends:

Equipping unskilled workers with ever more complicated and more expensive machines does not necessarily boost output. In fact, output might rise more significantly if the additional money were spent on more human capital instead of more physical capital.

In other words, what boosts output is the availability of skilled professionals and their involvement in the production processes. Therefore, human capital availability underpins sustainable development and confers advantages to countries possessing it and disadvantages to countries dispossessed of it. From a developmental perspective, human capital flight, which is known as brain drain, represents a serious economic loss to developing countries as they lose their considerable investment in generating these human capabilities and skills and limit the prospects of their future development capabilities. Brain gain, which is an attempt to redirect migrant skills and knowledge to home country for development, consists of remittances. But there is a wide gulf between the place of remittances and human capabilities and skills in the development matrix. Thus, the volume of remittances, although good for the economy, does not necessarily translate into development unless it is accompanied by relevant skills and expertise. What states with large stock of migrants have done in recent times is the evolution of roll-back strategies aimed at reversing the seemingly unidirectional flow of its skilled professionals. The brain gain programme has yielded different results to many states. Brain gain is underpinned by two basic assumptions: firstly, that the migrant to the industrialised country can play an important role in the development process of their home country through reverse-migration and/or transnational networks; and secondly, it is possible for the policy makers to initiate and amplify the positive development impulse of migrants by providing sufficient incentives even if they have been living abroad and not built any productive contact in their home country (Hunger 2002:2).

Many states have been able to reap the fruits of its diaspora by adopting various strategies. The nature of the fruits reaped by states depended on the policy frameworks they adopted and their successes in implementing them. **Table 5.8** shows the various institutional framework adopted by different countries to address diaspora issues.

**Table 5.8: Various Forms of Institutional Frameworks Adopted by Countries for Diaspora Engagement**

Countries with Ministry-Level Diaspora Institutions		Countries with Sub-ministry-Level Diaspora Institutions		Countries with Other Diaspora Institutions at the National Level		Countries with Diaspora Institutions at the Local Level		Countries with Quasi-Government Diaspora Institutions	
Country	Institution	Country	Institution	Country	Institution	Country	Institution	Country	Institution
Armenia	Ministry of Diaspora	Albania	Ministry of Foreign Affairs, The National Diaspora Institute	Chile	Inter-ministerial Committee for Chilean Communities Abroad	China	The Overseas Chinese Affairs Office (OCAO) of Shanghai Municipal People's Government	Dominican Republic	National Presidential Council for Dominican Communities Abroad
Bangladesh	Ministry of Expatriates' Welfare and Overseas Employment	Brazil	Ministry of Foreign Affairs, Undersecretary General for Brazilian Communities Abroad	China	State Council, Overseas Chinese Affairs Office of the State Council; Overseas Chinese Affairs Committee	India	Government of Kerala, Department of Non-Resident Keralites Affairs; Government of Gujarat, Non-Resident Indian Division	Morocco	Hassan II Foundation for Moroccans Resident Abroad
Benin	Ministry for Foreign Affairs, African Integration, the Francophone Community, and Beninese Abroad	Chile	Ministry of Foreign Affairs, General Office for Consular and Immigration Services; Office for Chileans Abroad	Mexico	National Council on Mexican Communities Abroad	Somalia	Office for Development and Partnership with the Puntland Diaspora Community.	Mali	High Council of Malians Abroad
Dominica	Ministry of Trade, Industry, Consumer and Diaspora Affairs	El Salvador	Ministry of Foreign Affairs, Vice Ministry for Salvadorans Abroad	Morocco	Council for the Moroccan Community Abroad; Ministerial Delegate for the Prime Minister Responsible for Moroccans Resident Abroad	Mexico	National Coordination for State-level Migrant Affairs Offices (various states)	Mexico	Consultative Council of the Institute for Mexicans Abroad

Georgia	State Ministry for Diaspora Issues	Ethiopia	Ministry of Foreign Affairs, Ethiopian Expatriate Affairs	Philippines	Office of the President, Commission on Filipinos Overseas; Committee on Overseas Workers Affairs			Peru	Advisory Council
Haiti	Ministry of Haitians Living Abroad	Mexico	Secretariat of Foreign Affairs, Sub-secretariat for North America; Institute for Mexicans Abroad	Poland	Inter-Governmental Committee for Polonia and Polish Minorities Abroad				
India	Ministry of Overseas Indian Affairs	Morocco	Subministry for the Moroccan Community Abroad	Sierra Leone	Office of the President, Office of the Diaspora				
Lebanon	Ministry of Foreign Affairs and Emigrants	Peru	Ministry of Foreign Affairs, Undersecretary for Peruvians Abroad	Nigeria	Nigerians in the Diaspora Organisation (NIDO); Nigeria National Volunteer Services (NNVS); Office of the Senior Special Assistant to the President on Diaspora Affairs; House Committee on Diaspora Affairs (House of Representatives)				
Mali	Ministry of Malians Abroad and African Integration	Philippines	Department of Labor, Overseas Workers Welfare Administration; Department of Labor, Philippine Overseas	Senegal	Council of Senegalese Abroad				

			Employment Administration; Department of Foreign Affairs, Office of the Undersecretary for Migrant Workers' Affairs						
Serbia	Ministry for Diaspora	Romania	Ministry of Foreign Affairs, Department for Relations with the Romanians Abroad						
Somalia	Ministry for Diaspora and Community Affairs	Uruguay	Ministry of Foreign Affairs, Directorate General for Consular Affairs and Expatriate Ties						
Sri Lanka	Ministry of Foreign Employment, Promotion and Welfare	Senegal	Ministry of foreign Affairs , Department of Senegalese Abroad						
Syria	Ministry of Expatriates								
Tunisia	Ministry of Social Affairs, Solidarity and Tunisians Abroad								
Yemen	Ministry of Expatriate Affairs								
Ghana	Ministry of Tourism and Diaspora Relations								
Senegal	Ministry of Senegalese Abroad								

Apart from the African Union’s recognition of the importance of the diaspora in national development, many African countries have made concrete efforts to mainstream their diaspora into their various development initiatives. Many African countries have adopted various strategies to replicate some of the success stories of Mexico and some Asian countries in their domestic domain. About 24 African countries have deregulated citizenship bottlenecks by conferring dual nationality rights on their citizens to ease and facilitate their movement.

**Table 5.9: Dual Nationality Profile of African Countries**

<b>Countries Permitting Dual Citizenship</b>	<b>Countries Prohibiting Dual Citizenship</b>	<b>Unknown Status</b>
Algeria Angola Benin Republic Botswana Burkina Faso Burundi Cape Verde Central African Republic Cote d’Ivoire Egypt Gambia Ghana Kenya Mauritania Morocco Namibia Nigeria Rwanda Sierra Leone South Africa Tanzania Togo Tunisia Uganda	Botswana Cameroon Congo Republic Democratic Republic of Congo Djibouti Equatorial Guinea Eritrea Ethiopia Gabon Guinea Lesotho Liberia Libya Madagascar Malawi Mali Mauritania Mozambique Niger Senegal Seychelles Somalia Swaziland Zambia Zimbabwe	Chad Comoros Guinea Bissau Sao Tome and Principe Sudan

*Source: Plaza and Ratha (2011:25)*

Many African countries collaborate with developed countries and international organisations to facilitate either reverse-migration or the involvement of their nationals in

their domestic development projects. At the fore front of international efforts to bridge the brain drain of African professionals are the United Nations Development Programme's (UNDP) Transfer of Knowledge through Expatriate Nationals (TOKTEN); IOM's Migration for Development in Africa (MIDA) and the Global Commission on International Migration (GCIM). Several African countries, including Nigeria, have benefitted from these programmes. TOKTEN was initiated in 1977 as a means to counter the exodus of developing countries' professionals. The strategy of TOKTEN consists of providing short-term advisory services in priority areas identified by host governments through the citizens of that country. TOKTEN was initially administered by the UNDP and the United Nations Fund for Science and technology for Development until 1994 when it came under the United Nations Volunteer programme ([http://www.unv.org/fileadmin/docdb/pdf/2008/TOKTEN\\_factsheet\\_01.12.2008.pdf](http://www.unv.org/fileadmin/docdb/pdf/2008/TOKTEN_factsheet_01.12.2008.pdf)). The MIDA programme was endorsed by the then Organization for the African Unity (OAU) (now AU) at the 74th Ordinary Session of the Council of Ministers and the 37th Ordinary Session of the Assembly of Heads of State and Government of the OAU that took place from 5 to 7 July 2001 and from 9 to 11 July 2001 respectively, in Lusaka, Zambia. MIDA's major objective consists of initiating capacity-building programmes, which help to mobilise competencies acquired by African nationals abroad for the benefit of Africa's development (<http://www.iom.int/jahia/Jahia/mida-africa/>). The Global Commission on International Migration (GCIM) was the first-ever global panel to address international migration. It originated at the instigation of the UN Secretary-General by the Governments of Sweden, Switzerland, Brazil, the Philippines, Morocco and Egypt and was launched on December 9, 2003 in Geneva. It was composed of 19 members with diverse perspectives and expertise, drawn from all regions with the mandate to provide the framework for the formulation of a coherent, comprehensive and global response to the issue of international migration. The Commission finished its work on 31 December 2005. The GCIM initiative gave rise to the 2006 UN High-Level Dialogue on Migration and Development as well as the 2007 first Global Forum on Migration and Development, which has been held annually since then (Judge and De Plaen 2011:8; <http://www.iom.int/jahia/Jahia/gcim>)

There are also initiatives at the pan-African level, especially the Africa Recruit and African Diaspora Marketplace (ADM). Africa Recruit was jointly established by the Commonwealth Business Council and the New Partnership for Africa's Development (NEPAD) as an economic development programme of the Africa Union (AU) and launched in 2001. Its major objective revolves around exciting the interest of Africans abroad to take

up jobs in Africa as well as providing consultancy services to African governments (Judge and De Plaen 2011:8). The African Diaspora Marketplace (ADM) was established in 2009 by USAID and Western Union as a form of competition to create opportunity for US-based members of the African diaspora — either US citizens or legal permanent residents — to contribute to economic development in Sub-Saharan Africa through a business plans for small and medium enterprises (SMEs). Currently, 21 countries qualify for consideration of proposals. These countries include Angola, Benin, Botswana, Côte D'Ivoire, the Democratic Republic of the Congo, Ethiopia, Ghana, Kenya, Liberia, Libya, Mali, Mozambique, Nigeria, Rwanda, Senegal, Sierra Leone, South Africa, Tanzania, Tunisia, Uganda and Zambia. The ADM is designed to spur job creation, generate income, and produce goods and services, preferably in designated sectors, by offering matching grants to African-diaspora member living in the United States (Newland 2010:16). In 2010, ADM awarded matching grants of up to US\$100,000 to 14 winners to them help fund businesses in seven countries (<http://diasporamarketplace.org/grantee-websites>).

Many African countries have interfaced domestic efforts with bilateral and multilateral agreements with developed countries. The idea is to facilitate reverse-migration of its diaspora for national development. A notable example is Mali. Malians have strong migratory tendencies. This has been attributed to the central position of Mali, coupled with its history and the permeability of borders (<http://www.migration4development.org/content/mali-0>). As a matter of fact, Mali's geographic disadvantage made it prone to migration. Apart from being landlocked, it is drought-prone and therefore, suffers all associated disadvantages. The migrant stock of Malians in 2010 was 1.012 million people representing between 7.6 and 9.0 percent of its 13 million population. Findley (2004) explains the high rate of emigration from Mali thus:

Migration is an apt response to the cyclical swings of poverty in this region. Migrants leave and work elsewhere during the dry season, returning for the rainy season or when times improve. In the meantime, they send money to their families in Mali to close the production-consumption gap. This migration response to cyclical downswings and seasonal food and cash shortages has been a part of the region's way of life for at least the last two centuries. It is especially the men of this region who have gone to other countries or parts of the region to earn money.

The Malian government has been making serious efforts to mainstream its diaspora into national development. Apart from the establishment of a full-fledged Ministry to address diaspora and African integration issues, the Malian government has been engaging the diaspora and collaborating with them through the High Council of Mali to evolve appropriate mechanisms, beyond remittances, for their involvement in nation-building. In 2003, the first ever Malian conference with the diaspora was held in Bamako. The conference which had over 200 delegates was convened to address the involvement of foreign-based Malians abroad in the country's development process, the promotion and protection of Malian executives working in international organisations and the mobilisation of Malian intelligentsia (Panapress 2003). Mali collaborates with France, which is the top destination country of Malians among Western countries, and other civil society organisations through joint initiatives and programmes to facilitate the reverse-migration of its diaspora. The two countries established a ministerial-level forum to address migration issues. The forum which is called the Mali-France Consultation on Migration deals with three issues, namely: the integration of Malians who want to remain in France; co-management of migration flows; and, cooperative development in emigration areas of Mali (Scheindlin 2003:13).

Ghana has also evolved robust diasporan policies to address its brain drain problem. In 2001, the Ghanaian government organised the first-ever Homecoming Summit in Accra. The summit was aimed at organising and mobilising the economic might of the Ghanaian Diaspora for national development. The Ghanaian government established the Non-Resident Ghanaians Secretariat (NRGS) in May 2003 to promote links with Ghana and its diaspora in order to mainstream them into national development. In addition, the Ghanaian government has also instituted such other domestic programmes as: dual citizenship rights to Ghanaians living abroad as an encouragement for them to return home freely; the establishment of the Ministry of Diaspora Affairs; the setting up of the Ghana Technology Park and the enfranchisement of its diaspora to vote in Ghanaian national elections and extension lifetime visa to Africans and people of African descent from all parts of the world (UNDP 2007:15; Africa Diaspora Policy Centre 2011:8). As part of the measures to address brain drain in the health sector former President John Kufour liaised with the Council of Ghana College of Physicians and Surgeons and introduced measures aimed at improving the working conditions in the health sector, including the provision of cars to health sector workers (Black et al 2006:37).

Internationally, a lot of countries have recorded significant success in tapping from the wealth of their diaspora, in terms of knowledge, experience, expertise and financial

resources, for national development. Such countries as China, India, Taiwan, the Philippines and Mexico have demonstrably initiated and implemented unique programmes that converted their brain drain to brain gain.

China has benefitted immensely from its diaspora, both those domiciled in the continent and those in the industrialised Western countries. According to Balaam and Veseth (2005:370):

The Chinese diaspora in Southeast Asia is a notable decentralised structure that in some ways dominates the economies in the region far more than do big-name multinational corporations. This economic diaspora is made up of thousands of Chinese-owned businesses linked by formal or informal family and cultural ties.

The brain gain process is not a one-sided affair. It involves the diaspora, the home country's government, international community and other stakeholders. But the critical actors that are indispensable in motorising it are the diaspora and the home-country government. Most countries that have registered success in mainstreaming their diaspora into national development evolved conscious policies and followed them through. The success of China in diaspora integration is anchored on the active collaboration of the Chinese diaspora and Chinese government. It is estimated that as much as 15 percent of foreign investment in China today originates from the diaspora and that nearly all the country's high-tech companies listed on NASDAQ were founded by the returnee Chinese diaspora (Balaam and Veseth 2005:371; UNDP 2007:9). The Chinese diaspora played various roles in national development in line with prevailing economic system and freedom in China. According to Balaam and Veseth (2005:371):

During the period of strong communist control of the Chinese economy, the focus of the diaspora network was on creating connections and opportunities for Chinese migrants outside of mainland China. As China has adopted more market-based economic reforms, however, a reverse flow of funds has been channelled through the diaspora network.

The Chinese government at all levels – national, provincial and municipal – played active roles by pursuing several policies: one, it encouraged overseas scholars to return to China. Between 1978 and 2002, approximately 580,000 students and scholars travelled abroad for higher studies. Out of this number, only 160,000, mainly government-sponsored visiting scholars, returned. Government's persistent efforts led to an increase in the number

of returnees, which rose from 13 percent in the 1990s to 45 percent between 2001 and 2002 (UNDP 2007:9); two, the Chinese government began the process of creating a favourable political climate that is more open and responsive than in the past and , therefore, amenable to the returning diaspora. Three, it began funding the universities and government-owned Chinese Academy of Sciences (CAS) to target returnees. Four, it adopted a plethora of programmes to lure scientists and technologists back and to help them engage in researches. It introduced such programmes as: the National 863 programme, the 100 Talents' Programme (*Bairen Jihua*) and so on. Five, the Chinese government created a bouquet of incentives, not just to lure them home but also to keep them at home. According to UNDP (2007:9):

Most awardees get new housing, a new laboratory, imported equipment, and a research team composed of graduate students and talented research staff, who may have home-grown Ph.D. These returnees immediately become Full Professors, regardless of their status overseas. The focus of these programs is cutting edge, scientific sectors, such as biotechnology, nano-technology, energy efficiency, environmental protection, and material sciences.

Apart from these specialised privileges for scientists and researchers, the entire country has been converted to an endless stretch of incentives, as provincial and municipal governments struggle amongst themselves to attract the returning diasporas. The preferences they grant include: housing discounts, imported cars, computers, free office or factory floor space, jobs for wives and special schools for their children, and residence permits for foreign passport holders, which allows them easy movement without having to relinquish their foreign citizenship. Six, the Chinese government made the returning Chinese diaspora the pivot of China's prestigious scientific projects, such as space programme and human genome mapping (UNDP 2007:9).

India is another country whose diaspora has made significant impact on its drive towards industrialisation and development, particularly in the information technology (IT) field. This was possible because of the relative prosperity of Indians around the world. As Pandey et al (2006):71) aver,

The Indian diaspora constitutes an important and unique force in the world economy. As a result of centuries of migration, more than 20 million people of Indian origin live in 70 countries. ... The earnings of the 20-million-strong Indian diaspora are equivalent to about two-thirds of the gross

domestic product (GDP) of India, with a population of more than 1 billion people.

The main engine of Indian diaspora's involvement in their country's development is the software sector of the IT field. This was not out of place as more than 300,000 people of Indian origin work in the IT sector in the United States and facilitated not less than 15 percent of IT start-ups. Also, nearly 40 percent of Silicon Valley start-ups in the 1990s had at least one founder of Indian origin (Pandey et al 2006:74, 76). India's software sector generated a revenue of US\$5.7 billion in 1999/2000 and it was projected that by 2008, the figure would reach US\$87 billion with the creation of 2 million additional jobs (UNDP 2007:9). Actually, the total revenue for India's IT industry in 2008/09 was US\$73.4 billion (<http://ict4dblog.wordpress.com/2010/01/05/indian-it-sector-statistics-1980-2009-time-series-data/>). Indian government's proactive policies drove the success of the diasporan involvement in the country's brain gain project. One, the government's national policy and investment strategy anchored on domestic economic reforms opened the economy. Two, the government identified five key sectors of the Indian economy which included the IT field as the drivers of its economic development programme. Three, it promoted open market economy that favoured liberalisation, tax and import liberalisation for the software sector. Four, it made extensive investment into technical and educational infrastructure. The Indian diaspora responded to the government's efforts by returning home and investing in the country. This is exemplified by the preponderance of the diaspora in the IT field. For example, 19 out of 20 top software companies in India were set up by and/or have non-resident Indians in their top management today (UNDP 2007:8).

Taiwan paints another picture of success in terms of diaspora engagement in national development. Government policies were at the forefront of converting Taiwanese brain drain into brain gain. Government's economic policy that produced economic growth and relative political stability acted as the first principle that underpinned the reverse-migration of Taiwanese diaspora. The trend of brain drain in Taiwan was as pernicious as it is in Nigeria, and indeed other African countries. According to O'Neil (2003),

During the 1970s, and 1980s, an estimated 20 percent of Taiwanese college graduates went abroad for advanced study, and few of them returned. At the peak of the brain drain in 1979, only eight percent of the students who studied abroad returned to Taiwan upon completing their studies.

The strategies which the Taiwanese government adopted included: one, the subsidisation of education only up to the level actually demanded by the national economy. What this implied was that Taiwanese government focused on providing strong universal basic education and vocational programmes as demanded by the domestic labour market and left out the subsidisation of advanced education whose products ended up in the advanced countries in search of higher pay. This programme produced medium-skilled manpower, which was relevant to Taiwan's booming manufacturing industry. And with relatively comfortable, rising wages and secure jobs, such workers had fewer incentives to emigrate (O'Neil 2003). Two, the Taiwanese government recognised the potentials of migrants as a veritable resource. The government used migrant expertise in formulating government policies in specialised fields. Three, the government set up the National Youth Council in the early 1970s. The tasks of the Council included: connecting Taiwanese businesses with skilled migrants, tracking migrants in a database, advertising jobs overseas and providing travel subsidies and temporary job placements to potential returnees. Four, the government used the National Science Council and the Ministry of Education to recruit thousands of migrants as professors and visiting lecturers for the country's growing universities (O'Neil 2003). Five, the Taiwanese government set up the Hsinchu Science-based Industrial Park which was a replication of the dense concentration of creative expertise found in Silicone Valley. O'Neil (2003) underscores the pivotal role of the park in driving the Taiwanese industrialisation thus:

The park successfully attracted both high-tech companies and returning migrants. Companies in the park employed 102,000 people and generated \$28 billion in sales in 2000. Although only 4,108 returned migrants worked in the park that year, 113 of the park's 289 companies were started by US-educated Taiwanese, and 478 of the returnees hold Ph.Ds, indicating that the returned migrants are better educated than the average worker in the park and wields influence disproportionate to their numbers. ... The park is the center of Taiwan's rapidly expanding research and development sector and a major contributor to the country's strong economic growth.

The Philippines has a long history of migration. Filipino migrants worked in major countries of the world from where they remit billions of dollars to their home country annually. For a long time, the Philippines has consistently made the top 10 remittance-receiving countries' list. Although the World Bank sources put the number of Filipino migrants at 4.3 million, Filipino authorities estimate that not less than 8 million Filipinos are

in the diaspora (World Bank 2011:205; Rosario 2011; Camroux 2008:3). The Filipino policy on emigration is a departure from most states. It conceives emigration from a positive perspective, as a safety net to cushion the incapacity of the Filipino economy to absorb the teeming number of unemployed people. Even though systematic emigration in the Philippines started in 1906 when the first batch of Filipinos arrived in Honolulu to work in the local plantations, it was in the 1970s following global economic crisis engendered by oil prices, that the Philippines launched a more structured and organised approach to labour migration, resulting in millions of Filipinos leaving the country and residing abroad (Baggio 2008:206).

Specifically, the Philippines has bureaucratic bodies that oversee different categories of employment matters as they affect Filipino migrants and prospective migrants. They include: the Philippines Overseas Employment Administration (POEA); the Overseas Workers Welfare Administration (OWWA); the Commission on Filipinos Overseas (CFO), and the Office of the Undersecretary for Migrant Workers Affairs (OUMWA). OWWA, established under the Department of Labour and Employment, deals with problems associated with temporary workers abroad, including organising pre-departure orientation seminars, repatriation issues and processing of new business loans. Also, POEA functions as manager of the overseas employment programme and sole authority regulating temporary overseas employment, including illegal recruitment by agencies. In 1995, the government set up the office of the Undersecretary for Migrant Workers' Affairs under the Department of Foreign Affairs to focus on the protection of migrant workers through providing legal advice and judicial support to distressed workers (Baggio 2006:216; Agunias 2009). The CFO is mandated to assist the executive and legislative arms in the formulation of national migration policies; develop and implement programmes that will promote the interest and well-being of Filipinos abroad; serve as a forum for preserving and enhancing the social, economic and cultural ties of Filipinos abroad and provide liaison services to Filipinos residing outside the Philippines among others (The Philippines 1980). The Commission is also actively promoting new policies aimed at mobilising and tapping the potentials of overseas Filipinos under *Lingkod sa kapwa Pilipino* or LINKAPIL (Service to Fellow Filipinos).

Despite the massive emigration of Filipinos and attendant billions in remittances, different indicators of development do not show improved productivity (Baggio 2006:213). The 2011 estimates put the Philippines-bound remittances at US\$23 billion (Mohapatra et al 2011:3). The Philippines has recently set in motion processes to overhaul its framework for diaspora engagement. It organised the first global summit of Filipinos in the diaspora between 27 and 29 September 2011. The aims of the summit were two-pronged: to evolve a

common ground for diaspora engagement in national development outside the traditional framework of remittance receipts. The summit envisaged a more direct involvement of the diaspora in investing in the Philippines, engaging in diaspora philanthropy, pursuing technology transfer, championing cultural and educational exchanges, facilitating legal assistance to distressed overseas Filipinos and evolving tourism initiatives. Two, to delineate the extent of the Filipino government's responsibility, especially in erecting the necessary frameworks to facilitate seamless collaboration between with the diaspora and the government. In his address during the summit, the Philippines Secretary of Foreign Affairs, Albert de Rosario reminded the 700 Filipino diaspora from over 40 countries that the Philippines government was still committed to the third pillar of its foreign policy which deals with the promotion and protection of the rights and welfare of all Filipinos in other countries and decidedly averred that the summit offered "an ideal opportunity not only to take stock of current actions but to consult on how and where to move forward" (Rosario 2011).

Other notable examples of countries that have leveraged the diaspora in their national development grid include Mexico, Columbia, Argentina and South Africa among others. The uniqueness of the Mexican diaspora is its narrow geographic spread. The Mexican diaspora is mainly concentrated in the United States. Despite its narrow diaspora spread, Mexico is an important migrant country considering the number of its migrant stock and the volume of its remittance portfolio. Mexico is among the top 10 remittance-receiving countries as it netted an estimated US\$24 billion in 2011 (Mohapatra et al 2011:3). The World Bank sources put the Mexican diaspora stock at about 12 million people (World Bank 2011:178). The Mexican government at all levels evolved innovative ways of mainstreaming the enormous remittance inflows into productive use. As Torres and Kuznetsov (2006:101) narrate,

Since the early 1990s, some state governments in Mexico have recognised migrants' potential and promoted new forms of public-private collaboration to increase the flows of community remittances and migrants' savings. These governments have recognized the potential to stimulate these flows through local policies and instruments.

Two notable examples of Mexican states that have forged a successful public-private collaboration are Guanajuato and Zacatecas who introduced *Mi Comunidad* (My Community) and *Tres Por Uno* (Three for One) respectively. Guanajuato's *Mi Comunidad* seeks to attract migrants' savings to *maquiladoras* dealing in garments and other textile products. Through such savings, 15 *maquiladoras* generating 500 permanent jobs were set

up. A *maquiladora* is a manufacturing operation that engages in assembling, processing, manufacturing and/or sale of designated products for profit. Zacatecas' programme channelled community remittances to small-scale infrastructure development, such that US\$1 contributed by migrants was matched by US\$1-3 from the federal government and US\$1 from state and municipal governments respectively (Torres and Kuznetsov (2006:102). Other government initiatives include: the Paisano Programme, which encourages reverse-migration through the improvement of border and custom services, and the Program for Mexican Communities Living Abroad (PCMLA), which also channels remittances to local development projects.

There are a lot lessons that Nigeria could learn from the diverse experiences of other countries that have mitigated the devastating impact of brain drain. Learning these lessons and mainstreaming them into its policy framework appears easy since Nigeria has already recognised the relevance of its diaspora in its development framework and has also set up preliminary structures.

## CHAPTER 6

### SUMMARY, CONCLUSION, AND RECOMMENDATIONS

#### 7.1 SUMMARY AND CONCLUSION

This study examined the brain drain phenomenon and National development in Nigeria. We were basically concerned with the implications of brain drain to Nigeria's development efforts considering that the Nigerian diaspora is composed of the most virile, educated and highly-skilled segment of its manpower formation, which is generally considered indispensable for national development. To be able to raise relevant questions necessary to address the vital concerns of our research area, we first of all took a detailed look at the state of inquiry on this subject matter and thereafter distilled three core concerns which we specifically formulated in hypothetical terms.

The entire effort of this study was to empirically answer the research questions as couched in our hypotheses. The questions that were raised in this study and which served as the radar that directed the research efforts were as follows:

- 1) Does the sustained depletion of the stock of Nigeria's health professionals through brain drain necessarily lead to inefficient healthcare delivery?
- 2) Have domestic investment incentives boosted diaspora-led investments in the Nigerian economy?
- 3) Is the tighter regulation of the global regime of intellectual property rights inhibitive of diaspora-led industrial investments towards technology transfer?

The above questions set the parameters for the research as the hypotheses were derived from them. Thus our hypotheses were:

- 1) The sustained depletion of the stock of Nigeria's health professionals through brain drain leads to inefficient healthcare delivery.
- 2) Domestic investment incentives tend to boost diaspora-led investments in the Nigerian economy
- 3) The tighter regulation of the global regime of intellectual property rights is inhibitive of diaspora-led industrial investments towards technology transfer.

To be able to adequately address these hypotheses in terms of their validation or otherwise we adopted One-Group Time Series Research Design. This design enabled us to look at our variables and the analytic units of our study in such a way that compensated for

the absence of control group. The study was divided into five chapters. Chapter one was devoted to setting out the central problematique of the study as well as the research procedures. The relevant literature were reviewed and the theoretical framework set out. The study anchored its investigation on public choice and modern world system theories, which were synthesised from the political economy theoretical framework. The utilitarian value of this synthesis lay in their reinforcing applicability in accounting for the domestic and international forces that motorise brain drain out of Nigeria. The public choice theory locates the domestic impetus to brain drain in the myriad public policy choices of successive regime. Most of these policy choices created systemic contradictions that led to economic crisis, political instability and other socio-cultural rigidities that induced brain drain. The modern world system theory accounted for the international angle to brain drain. It anchored its analysis on the delineation of the modern capitalist world order and the complex system of interactions that tended to spawn global inequality. The inequality in the system creates the conditions that conduce well with migration as individuals, or more technically correct, labour power seeks market value for its services as it becomes marketised.

Chapter two addressed issues pertaining to the political economy of migration, human capital expropriation and brain drain in Nigeria. We set out to evaluate the Euro-American contention that brain drain was a recent phenomenon. Our evaluation exposed the parochialism of this view and held that its shortcoming inhered from the methodological inexactitude of not properly contextualising it within historical epochs and the predominant forces of production. It examined the push and pull factors that underpin brain drain.

Chapter three was also preoccupied with the impact assessment of brain drain on selected sectors of the Nigerian economy. This chapter addressed the three hypotheses of the study, to wit: one, whether sustained depletion of the stock of Nigeria's health professionals led to inefficient healthcare delivery. It concluded in the affirmative after empirically examining the health sector and the worsening health indices. The rival explanation which could have come from underfunding, infrastructural inadequacies and so on were empirically studied and were found to have been the cause. We found that the depletion of health professionals through brain drain accounted for the inefficient healthcare delivery in Nigeria as brain drain not only eroded the doctor-population ration necessary for efficient healthcare delivery but the capacity for the production of qualified health professionals as attested by data on health manpower turn-out; two, whether domestic investment incentives tended to boost diaspora-led investments in the Nigerian economy. The study found that since 2002 when the Nigerian government recognised the diaspora as a veritable source of foreign

capital infusion as well as a source of FDI inflows into the Nigeria economy, the FDI portfolio has appreciated. A component of such foreign capital inflow, remittances, had consistently bludgeoned in leaps and bounds with positive effects within the economy. The study found that indeed positive domestic incentives, an offshoot of domestic reforms under the auspices of NEEDS, tended to boost diaspora-led investments; three, if all the positivities attached to brain drain in terms of benefits to home country were feasible. It narrowed its inquiry on how IPRs have facilitated or impeded diaspora-led industrialisation through the instrumentality of technology transfer. It looked at the domestic framework for technology transfer and denoted the adequacy of these frameworks to actually facilitate technology transfer. The study evaluated the regime of IPRs and its restrictive provisions and found it inhibitive of diaspora-led industrialisation via technology transfer. The implication of this is that it has debunked the view that the Nigerian diaspora constituted a reserve army for the country's development.

Chapter four evaluated policy, legislative and institutional frameworks for the integration of diaspora resources in Nigeria. Although there are perceptible government efforts to harness the Nigerian diaspora and mainstream them into national development, there is absence of a master plan to anchor it. The power to address migration and diaspora issues are scattered in various government institutions thus creating duplication of efforts and unnecessary rivalry. What the Nigerian government has done so far, with regard to its diaspora and their engagement in national development, was the appointment of some of them into the government. There are so many other areas that the Nigerian diaspora could be relevant in national development but these areas have not been properly articulated.

Chapter five encapsulated the summary, conclusion, major findings and recommendations for the advantageous harnessing of the diaspora for meaningful national development.

From the findings of this work it could be concluded that out-migration is not completely negative as it also has positive effects on the economy. But a juxtaposition of the effects of out-migration, in terms of brain drain, shows that its negative effects far outweigh its positive contributions to the Nigerian economy. Brain drain constitutes capital flight in concrete terms as various highly-skilled Nigerians who were trained at enormous cost to the economy transferred their skills to the continued development of the developed countries and continued underdevelopment of their country. It was established in the course of this study that a skilled African makes enormous contributions to his host country and spends his earnings there; in contrast, he remits a portion of his earnings which is considered

insignificant. IFAD (2007: 8) puts the annual average remittances per migrant at US\$1,177. While the perennial increment in the volume of remittances could be an indication of improved earnings or increased tendency to remit money home or both, the expansion in the population of Nigerian émigrés could be a more plausible explanation. Of course, if the average migrant were to remain in Nigeria, he would have made more contributions than his average remittances could make. But there is a caveat: provided the modern world system is reorganised to remove the debilitating inequality that characterise it.

The modern world system as presently constituted provides the fodder that feeds and sustains migratory pressures. Essentially, the brain drain phenomenon has dual interpretations - to the individual and to the state - that are mutually exclusive. It is this duality in the interpretation of brain drain that imbued it with associated conceptual confusion. At the individual level, out-migration constitutes a leeway to economic freedom and self-actualisation. To the individual therefore, out-migration means brain utilisation with adequate compensatory package. But to the state emigration constitutes a valid erosion of the vital ingredients of governance and development. The root of the dilemma that confronts the state and the individual is locatable in the modern world system that consigns Nigeria (and countries designated as developing countries) to the periphery of the world system and the seemingly cyclic war for change and maintenance of the status quo.

The fact which this study established is that the brain drain is consistent with the overall stratagem of capitalist exploitation. The brain drain fits into the epochal schema of exploitation and self-renewal of capitalism. As our study established, the core countries poached the vital health professionals of Nigeria and other African countries to provide better health services in their domain even while paying lip-service to health crisis in the country and the continent. And to ensure that the exposure of Nigerian and African professionals to their knowledge base was not expropriated and thus pave the way for economic growth and development likely to lead to their exit from the periphery, the core countries, under the auspices of WTO initiated the IPRs. The IPRs thus constituted an effective bulwark against piecemeal transfer of technology through the diaspora. In the main, the brain drain has taken far, far more than it can ever give back and constitutes the Iron Gate that must be dismantled for development to happen.

## 7.2 MAJOR FINDINGS

This study made several findings about the impact of brain drain on Nigeria's development. These include:

- 1) Brain drain is a major disincentive to Nigeria's national development. Apart from the loss of national investment in human resource development through the subsidization of education by the various levels of government, brain drain has constrained the capacity for the expansion of national development projects.
- 2) The rate of emigration of Nigeria's highly-skilled professionals, especially in the health sector far outstrips the rate of replacement, which deepens the manpower crisis in the sector. The production capacity of Nigeria's medical schools, which are plagued by infrastructural challenges, inadequate funding and lack of relevant teaching personnel, has been constant while the demand for medical manpower across the globe has been on the increase. There is double standard within the international arena as the developed countries condemn the mass emigration of medical personnel in the face of critical shortages in the sector, in one breath, and in another breath, introduce policies to harness medical manpower from Nigeria and other countries.
- 3) The data of Nigerian medical doctors and other health professionals are grossly unreliable as a policy tool. The MDCN's register of doctors is not regularly pruned and updated to determine the actual number of doctors in Nigeria. Thus, the list is inclusive of those who have died, emigrated out of the country as well as those that have emigrated out of the profession. Also, there is no indication in the medical register whether those who are considered as being in good standing (that is, doctors that have paid their annual practising fees are still actively in the medical profession, practising within the country or emigrated abroad. The same scenario plays itself out in other medical fields. Thus, the data bandied as constituting the number of Nigerian doctors is grossly exaggerated and therefore misleading as policy-making information.
- 4) There are many institutions and stakeholders jostling for a place in migration management in Nigeria. This has led to duplication of efforts and tendency for

unnecessary scheming for ascendancy amongst government institutions. There is ambivalence and policy inconsistency in government circles. For instance, the Nigerian government moved NIDO from the Ministry of Foreign Affairs to the presidency and also moved the coordination of the National Policy on Migration from the Office of the Special Assistant to the President on Diaspora Matters to NCFR. All these policy inconsistencies and ambivalence introduce unnecessary politics.

- 5) Many Nigerians in the diaspora are trapped abroad as a result of crisis of under-achievement. Many of them are faced with such dilemmas as under-employed and unemployed despite their relative academic achievements. Some have become destitutes as a result of old age and drug addiction. The major dilemma of returning home is lack of operational base (accommodation).
- 6) Since 2002 when the federal government signified its interest to leverage the diaspora into national development, there is no holistic policy framework detailing how this could be achieved. The migration arena is littered with piecemeal, disparate, ad hoc and uncoordinated strategies. Lack of a national policy on migration and strategies for diaspora integration has sidelined and undermined their purposive mainstreaming in national development.
- 7) There is no reliable data about the number of Nigerians in the diaspora as well as their professional affiliations. Every thing connected to migration and diaspora issues are based on estimates and conjectures that lack universal validity. Every group, ranging from scholars to national and international institutions, bandies various figures that lack the baseline for generalizability as they are often arbitrarily arrived at. Despite the launch and establishment of the Global Database of Nigerians in Diaspora (GDND) since the 21st of February 2009, the databank is yet to be consolidated as it is bedeviled by several challenges ranging from policy inconsistencies and policy reversals to funding.
- 8) Many developed countries rely on the “importation” of human resources from Nigeria and elsewhere to augment the manpower crisis that hangs over them like the Sword of Damocles. The combination of such factors as national affluence and prosperity, high life expectancy, fertility and birth-rate, and good health has led to ageing population

in many developed countries. Therefore, unless the manpower requirements of these developed countries are adequately augmented through the attraction of human capital from Nigeria and other countries, many of them will be enveloped in manpower crisis that will affect their position and relevance in the global world order. Thus, despite the economic contradictions in Nigeria and other developing countries, the superiority of the developed economies, especially in terms of opportunities and return on labour power, will serve as superior inducement for emigration among highly-skilled personnel.

- 9) Several countries such as China, Taiwan, India, the Philippines and Mexico among others have leveraged their diaspora into national development by putting in place relevant policies and necessary infrastructures. In most of these countries, their diaspora drive their FDI, technology development and generation of foreign exchange. This is often achieved through the floatation of specialised diaspora financial instrument.
- 10) Nigeria occupies a position on the world's top-ten remittance-receiving countries' chart. Despite the billions of dollars that are annually remitted by the Nigerian diaspora, these remittances have no discernible macroeconomic impact on the economy. The Nigerian state has no operational policy framework or innovative strategy to raise money from the diaspora. So, despite the consistent high volume of remittances to Nigeria, remittances have only served subsistence purposes. In contrast, so many countries in the top-ten remittance-receiving bracket have converted remittances into tools for national development.
- 11) There appears to be extreme personalisation of policies on migration and diaspora issues. The interest of government in harnessing Nigerian diaspora and mainstreaming them into national development appeared to be dictated by the personal preferences of Nigerian leaders. Till today, there is no operational national policy to guide policy formulation and implementation in the area of diaspora engagement.
- 12) The major push factors in the Nigerian state, which birthed the conditions for emigration and brain drain, have not been substantially addressed. The Nigerian economy is still in the woods. The political arena is still characterised by arbitrariness

and instability. The country is still enveloped in insecurity, which emanates from religious bigotry, political intolerance, and ethnic chauvinism.

- 13) The dual nationality policy of Nigeria has created certain dilemmas for the Nigerian diaspora. There is conflict of nationality, which also affects the direction of patriotism. The inefficiency, corruption and manifest nonchalance associated with Nigerian missions abroad have created crisis of trust between them and the diaspora.
- 14) Lack of databank on the actual number of Nigerians in the diaspora is as a result of certain domestic constraints namely, absence of a specialised institution handling migration and diaspora issues; low ICT capability, politicisation of diaspora issues and lack of funds.
- 15) Despite the shift from the use of informal to formal channels by Nigerian diaspora to effect remittances as well as institutional improvement in the means of remitting money to the country, more still needs to be done. The Nigerian remittance corridors are characterised by monopoly control by the Western Union and Money Gram, exclusive agreement between these MTOs and agent-banks, and high transaction costs.
- 16) The traditional inefficiency of Nigerian Missions abroad alienated the diaspora from them. These Missions ought to have been proactive in designing strategies to address diaspora issues as well as being the repositories of data on Nigerian diaspora but they have not lived up to this expectation.
- 17) There is no national honour awards dedicated to the Nigerian diaspora community to recognise those who have made significant contributions to the country's development.

### **7.3 RECOMMENDATIONS**

The brain drain is undoubtedly an albatross that compromises the possibility of development in Nigeria. Apart from the physical relocation of highly skilled professionals

and the attendant loss of their immediate contributions to national development, national capacity is threatened in terms “restocking capabilities”. Based on our major findings we prescribe as follows:

- 1) The brain drain is human capital flight, which must be halted. Nigeria’s manpower resources which emigrated were subsidised by government. In Nigeria, there is no full tuition in public schools from the primary to the tertiary levels. For this reason, brain drain has been described as the subsidisation of other countries’ economies by Nigeria. Nigeria should remodel its educational sector to meet its peculiar needs. Nigeria should subsidise education to the extent of its immediate needs and build remunerative packages to keep this crop of trained personnel. Taiwan used this strategy to keep its necessary manpower at home.
- 2) In this era of “no subsidy”, labour-receiving countries must be made to pay for the use of highly-skilled professionals by extrapolating and adopting brain gains tax. Nigeria should adopt sports model in relation to brain drain of its professionals. This model will allow the Nigerian government to negotiate transfer fees with countries desiring certain skilled Nigerians and for these professionals to come home from time to time to help in domestic projects. Relevant insights could be drawn from FIFA and its rules on transfer of soccer skills and relevant fees. Nigeria should set up a specialised institution on diaspora issues to coordinate this.
- 3) The Nigerian medical and academic professionals have been the most targeted professionals by labour-receiving countries. This has created crisis in these sectors. Just like the developed countries used the platform of the WTO to expand the frontiers of intellectual property rights by introducing “trade-related intellectual property rights” (TRIP), Nigeria should, through the African Union, press for the inclusion of brain drain as part of TRIP. Just like the argument by the developed countries that without adequate protection of IPRs, their firms would find it difficult to profit from product and process innovation; likewise, without the imposition of certain costs on the emigration of Nigeria’s highly-skilled professionals, the country can never benefit from its human resources. The specialised diaspora institution will facilitate this.

- 4) Corollary to the above, the WIPO should be strengthened to incorporate this in its mandate. In other words, brain drain should be seen in terms of its effects on the development trajectory of nations and appropriate policies for compensation worked out.
- 5) Efforts should be made to establish a reliable databank of Nigerian medical practitioners. All medical bodies must embark on the census of its members in order to establish the actual number of its membership. The Medical and Dental Council of Nigeria, the National Universities Commission, Nigeria Bureau of Statistics and the National Planning Commission should liaise among themselves to produce a reliable databank and statistics of production and emigration patterns of medical professionals.
- 6) Government should set up a diaspora village in Abuja to accommodate the Nigerian professionals willing to brave it and come home. It should also set up a drug therapeutic and rehabilitation centre to address the problem of drug addiction among them.
- 7) Brain drain of Nigeria's highly-skilled professionals was a response to certain domestic stimuli, mainly economic crisis, political instability and ethnic rivalries that often degenerated to bloodbath. Contemporary brain drain could be periodised to have commenced in 1966 when the first military coup d'état took place. The Nigerian civil war and the economic distress that hit the Nigerian economy from 1982 intensified it. The peak was post-1986 when attempts at economic reforms deepened the crisis. What needs to be done to roll back brain drain is the introduction of workable strategies to address the underlying factors that engendered the conditions for emigration. Nigeria should ensure political stability; evolve a strategy for national reconciliation and develop a national security policy. This will serve as a form of signal to the Nigerian diaspora and rekindle their desire to return home. The federal ministry of information and national orientation and the national security apparatuses should implement it.
- 8) The Nigerian government should streamline efforts at mainstreaming the diaspora into national development by weeding out the multiplicity of institutions jostling for a

space. What needs to be done is to centralise diaspora issues in one institution. We recommend the setting up of a Commission or full-fledged ministry for the diaspora. The Commission or ministry will have the mandate to decide areas of collaboration with other agencies and all such issues. The manner in which issues relating to migration and diaspora are currently handled in Nigeria can never yield the kind of result recorded in other countries like China, Mexico, India and others.

- 9) The Nigerian government should ensure consistency in its policy prescriptions with regards to migration and diaspora issues. Since 2005, the Nigerian government has not been able to produce a national policy on migration despite efforts invested in its production. Efforts should be made to produce such a policy framework immediately. It should be noted that the evolution of such a policy framework without a specialised agency to execute its provisions might be counter-productive. Thus, the conferment of the force of law on such a policy framework must be accompanied by the creation of a specialised institution to implement its provisions.
  
- 10) There is an absence of data about the actual number of Nigerians in the diaspora and their qualifications. A reliable data is part of the ensembles of productive planning. Its absence poses a serious challenge to policy formulation and general planning for development. The diaspora data-capturing exercise is indirectly affected by the ambivalence of government on diaspora issues. Nigerian government should, not only establish a domestic institution and saddle it with the development and maintenance of a databank of Nigerians in the diaspora, it should accord it priority status and adequately fund it.
  
- 11) The Nigerian government should evolve clear-cut pro-diaspora domestic and foreign policies that would place the welfare of Nigerian diaspora in the front burner. This strategy will fire their patriotic zeal for the country and rekindle their feeling of “Nigerian-ness”. It will certainly make them eager to contribute to national development and “ambassadors-at-large” for the attraction of foreign investments. The government should set up a specialised technology park to harness diaspora scientific and technological talents. Instead of building a brand-new park, the federal government can utilise TINAPA initiative of Cross River State as a twin-strategy of

building a critical mass of returnees and developing a platform for industrial development.

- 12) Government should de-personalise diaspora issues by setting up an independent institution to handle diaspora issues. The institution will be guided by the extant law establishing it. This will ensure continuity and sustain diaspora patriotism.
- 13) Although the superiority of the labour-receiving countries of the West means that they will continue to attract highly-skilled professionals from Nigeria and other less-developed countries, a robust economy will drastically reduce the rate of emigration. The Nigerian government must embark on extensive restructuring of its economy to make it responsive and competitive enough to stop mass emigration. The Central Bank of Nigeria, the National Planning Commission, the Nigerian Investment Promotion Commission and the National Bureau of statistics must build critical mass of statistics to showcase the strong points of the Nigerian economy.
- 14) The Nigerian government should include the diaspora in its national identity card project as a mechanism to extract a confirmation of their patriotism to Nigeria outside the framework of dual nationality. The Nigerian government should develop National Identification Card System for Nigerians in the diaspora. This should be made available to all Nigerians domiciled abroad. The possession of this identification card should qualify the migrant in distress express government intervention and also confer eligibility on the migrant to vote in national elections.
- 15) The Nigerian government should deregulate the remittance market by creating room for the entrance of more MTOs. The entrance of more MTOs in the face of rapid advancement in ICTs in Nigeria will have positive impact on remittance transaction costs.
- 16) The Nigerian government should expand the primary mandate of its Missions Abroad to include the provision of personalised services such as assisting in the integration efforts of migrants by connecting them to the migrant communities where they exist, providing legal assistance and offering immigration support services and advice. The government should also expand its diplomatic presence by creating new consulates

where there are large Nigerian populations in order to reduce the stress of going to the embassy, which is often located at the capital city.

- 17) Nigeria has not leveraged its diaspora into its development agenda. Since 2001 when the presidential dialogues led to the formation of institutional frameworks for diaspora engagement, the country has not benefited from them in concrete terms. The Nigerian government should create a mechanism through the CBN, Ministry of Finance and Debt Management Office (DMO) to harness the excess liquidity of the diaspora through the floatation of bonds and other specialised securities.
- 18) Nigeria should institutionalise a national merit award specifically to honour members of the Nigerian diaspora who have made significant contributions to the country's development agenda. This will both acknowledge those who have contributed to Nigeria's development efforts and act as a healthy incentive to others to make their own contribution.
- 19) Finally, Nigeria should get its leadership question right by enthroning a visionary, pragmatic, dedicated, and patriotic leadership through credible elections. Once that is achieved, the next step is to mobilise and utilise the abundant human and material resources for the onerous but achievable task of productive and sustainable development.

The brain drain cannot be decreed out by fiat but by conscious, purposeful and result-oriented transformation of the socio-economic and political forces for national development.

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