

THE IMPACT OF BRAIN DRAIN ON ECONOMIC  
DEVELOPMENT IN AFRICA: A CASE STUDY OF KENYA

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PROJECT PRESENTED IN PARTIAL FULFILMENT OF  
THE REQUIREMENTS FOR AWARD OF THE DEGREE OF  
MASTER OF ARTS IN INTERNATIONAL STUDIES AT  
THE INSTITUTE OF DIPLOMACY AND INTERNATIONAL  
STUDIES, UNIVERSITY OF NAIROBI

## DECLARATION

This project is my original work, and has not been presented for award of degree in any other university.

Signed.....

Date..... 4th August 2009

This project has been submitted to the Board of Post Graduate Studies for examination with my approval as University supervisor

Dr. Lucas Njoroge

Signed.....

Date..... 20/11/2009

## ACKNOWLEDGMENT

I would like to particularly thank those who contributed to the successful completion of this project paper. I am particularly indebted to Simon Clare my fiancé for the invaluable guidance, utmost understanding, encouragement and support demonstrated over the entire period of the study.

I am beholden to my supervisor Dr Lucas Njoroge for his invaluable support and his tireless effort in directing and advising me on the best approach to use in writing this paper.

Special appreciation goes to the entire University of Nairobi staff who in one way or another contributed to the successful completion of this paper.

My gratitude particularly goes to Mr Ibrahim Farah of the University of Nairobi who bore with my insistent queries and who provided me with resource material.

My special appreciation goes to my dad Solomon Kimani, my siblings Kate and Boi and my nephew Lien Kimani for their understanding and constant encouragement to finish the project.

I owe a lot of thanks to my friends Lucy Mwangi and Salome Lemlem for their encouragement, support and continued guidance. Needless to say, I alone bear the entire responsibility of whatever shortcomings the work may have.

## **DEDICATION**

To my loving dad Mr. Allan Kimani for his inspirational love and encouragement,  
and my baby, who gave me the resolve to finish my project.

## ABSTRACT

Brain drain is also known as human capital flight and means the emigration of trained and talented individuals to other nations or jurisdictions therefore losing investment in higher education and also the social capital in one's country.

The impact of brain drain on economic development of African countries is investigated in this study. Specifically, it researches this phenomenon on the case study of Kenya.

The effects of brain drain are assessed on economic development in Kenya, by seeking to examine the extent of brain drain in Kenya, its direct and indirect impacts and to proffer suggestions on how to reverse the trend.

Professionals in the nursing, teaching, engineering sector were interviewed to give their views on causes, effects and strategies to mitigate of brain drain in Kenya.

Implications of brain drain on economic development in Kenya include the loss of human capital, class stratification, mass returnees, private investment and consumption, remittance relieving, unemployment, experienced returnees and brain circulation.

It is recommended that the government should improve incentives for migrants to remit for example by permitting its nationals working abroad to hold foreign currency bank accounts and finally to keep professional in the country by providing better employment and career opportunities, establish programmes to lure emigrants back home.

## **LIST OF ACRONYMS AND ABBREVIATIONS**

IDRC: International Development Research Centre

WHO : World Health Organization

UNDP: United Nations Development Programme

LDC's : Least Developed Countries

USA : United States of America

PPC : Production Possibility Curve

GDP : Gross Domestic Product

FNPF : Fiji National Provident Fund

SANSA : South African Network of Skills Abroad

UK : United Kingdom

AAU: Addis Ababa University

ILO : International Labour Organisation

SAP : Structural Adjustment Programme

NEPAD : New Partnership for African Development

HIV/AIDS : Human Immunodeficiency Virus/ Acquired Immuno Deficiency Syndrome

OECD: Organisation for Economic Co-operation and Development

SSA : Sub Saharan Africa

DC's : Developed Countries

KANU : Kenya Africa National Union

IMF : International Monetary Fund

HDI : Human Development Index

NIC's : Newly Industrialised Countries

HPAE's : Health Professionals and Allied Employees

ICT : Information and Communication Technology

ODA : Official Development Assistance

CKRC : Constitution of Kenya Review Commission

FDI : Foreign Direct Investment

WHADN : Western Hemispher African Diaspora Network

USD : United States Dollar

EPA : Economic Partnership Agreement

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## CHAPTER ONE: INTRODUCTION

In 25 years, all the best brains in Africa will have migrated.<sup>1</sup> Data on brain drain in Africa is scarce and inconsistent; however, statistics show a continent losing the very people it needs most for economic, social, scientific, and technological progress. Other than benefiting the rest of the world, this trend has adversely affected Africa and has sparked claims that the continent is dying a slow death from brain drain.<sup>2</sup>

According to an International Development Research Centre (IDRC) study, Africa has already lost one third of its human capital and is continuing to lose its skilled personnel at an increasing rate. It is estimated that 27,000 Africans left the continent for industrialized countries between 1960 and 1975. During the period 1975 to 1984, the figure rose to 40,000. Since 1990, at least 20,000 people leave the continent annually.<sup>3</sup> Moreover, there are currently over 300,000 highly qualified Africans in the Diaspora, 30,000 of which have PhDs.

Brain drain in Africa has financial, institutional, and societal costs. The phenomenon is putting a huge strain on the continent because to fill the gap created by the skills shortage, African countries spend an estimated \$4 billion annually (about 35% of total official development aid to the continent) to employ about 150,000 non-African expatriates.<sup>4</sup> Besides, African countries get little return from their investment in higher education, since too many graduates leave or fail to return home at the end of their studies. The departure of health professionals has eroded the ability of medical and social services in several sub-Saharan countries to deliver even basic health and social needs.

<sup>1</sup> Barka B. L., Keynote Address *Regional Conference on Brain Drain and Capacity Building in Africa* Addis Ababa, Ethiopia, 22-24 February 2000

Jaycox E. V. K., 'Capacity building: the missing link in African development' in *The Courier* (Africa-Caribbean-Pacific/European community) No.141, Sept.-October, 1993 pp.73-75: 73

Tapsoba S., S. Kassoum, P. Houenou, B. One, M. Sethi and J. Ngu., *Brain Drain and Capacity Building in Africa* (Canada: International Development Research Centre, 2000) p. 16

Shikwati J. S., *Brain drain versus Africa's economic woes* (Nairobi: Inter Region Economic Network, 2000) p. 32

Thirty-eight of the 47 sub-Saharan African countries fall short of the minimum World Health Organization (WHO) standard of 20 physicians per 100,000 people.<sup>5</sup> Statistics from individual countries are more threatening. Nigeria, Ghana, Kenya and Ethiopia are believed to be the most affected.<sup>6</sup>

In the early 70s young college graduates in Ethiopia chose to engage in various types of farming and other businesses, rather than being employed as public civil servants. Very few of them chose to abandon their country and emigrated to other states then. However, a dramatic surge in emigration started in mid-1970s, coinciding with the ascent to power of the Derge regime and the institution of a disastrous economic and political turmoil. According to the UNDP, Ethiopia lost 75 per cent of its skilled workforce between 1980 and 1991. The country produces many excellent doctors, but there are more Ethiopian doctors in Chicago than there are in Ethiopia.

It is estimated that there are some three million Ghanaians living outside the country with about a third of them in Europe and North America. These are made up of skilled and unskilled persons. According to Ghana's official statistics institute, in the period 1999 to 2004, 448 doctors, or 54% of those trained in the period, left to work abroad. An estimated 600 Ghanaian doctors work in New York City, about 20 percent of its requirement when the country currently has only about 2 000 doctors - one for every 11 000 inhabitants.<sup>7</sup>

The impact of brain drain in Nigeria, just like in other developing countries, is devastating. More than 2,000 Nigerian doctors work in the United States even though

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<sup>5</sup> Ibid., p. 32

<sup>6</sup> Jaycox E. V. K., 'Capacity building: the missing link in African development' in *The Courier* (Africa-Caribbean-Pacific/European community) No.141, Sept.-October, 1993

Report of the Institute of Statistical Social and Economic Research September 2005 available at [www.issr.org](http://www.issr.org)

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<sup>6</sup> Jaycox E. V. K., 'Capacity building: the missing link in African development' in *The Courier* (Africa-Caribbean-Pacific/European community) No.141, Sept.-October, 1993

Report of the Institute of Statistical Social and Economic Research September 2005 available at [www.issr.org](http://www.issr.org)

there continues to be a critical need for health professionals in Nigeria. About 10,000 Nigerian academics are employed in the United States alone.<sup>8</sup>

### **1.1 Problem Statement**

This study investigates the impact of brain drain on economic development of African countries. Specifically, it researches this phenomenon on the case study of Kenya. Brain drain, broadly construed, not merely reduces the supply of vital intellectuals in Kenya and other developing countries; even more seriously, it diverts the attention of those who remain from important local problems and goals. Throughout four decades of Africa losing its best and brightest, the world debated the semantics of the issue and focused almost solely on remittances, overlooking the implications of brain drain on human resources, institutional capacity and health/social services thus economic development.

Currently, Africa's share in the world's scientific output has fallen from 0.5% to 0.3%, Africa is suffering a continuing brain drain of scientists, engineers and technologists; and Africa as a whole counts only 20,000 scientists or 3.6 % percent of the world total.<sup>9</sup> The evidence is clear, 80 % of scientific research is concentrated in a handful of industrialized countries. The US Congressional Research Service computed in 1971-72 that the USA gained \$20,000 annually on each skilled migrant from the developing countries. In other words, it saved 883 million dollars in education costs, against a loss of 320 million dollars for the LDCs.

In Kenya, it costs US\$40,000 to train a doctor in Kenya; US\$15,000 for a university student. The Kenya Medical Association recently warned that emigration of medical professionals is threatening the very existence of the country's health services.

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Bankole Oni, 'Capacity Building Effort and Brain Drain in Nigerian Universities' Report for the Nigerian Institute for Social and Economic Research, May 2002

Adedapo A., *South-North Migration: The African Situation* (Geneva: IOM, 1990) p. 12

The Association said that low pay is forcing about 20 doctors to leave Kenya each month to take better positions in other countries. Kenya now has only 600 doctors and 70 dentists in the public sector to treat 28 million Kenyans. The Kenya Medical Association argued that this brain drain has contributed to a general deterioration in medical services for the masses. Increasingly, medical care and health facilities are only available to the wealthy.<sup>10</sup>

In 2006, 79.0 per cent of Kenyans could read and write, hence a 19.0 percentage points higher than the average for Africa south of the Sahara. The combined primary, secondary and tertiary gross enrollment ratio in 2005/6 for Kenya was 52%, eight percentage points higher than the average for Africa south of the Sahara.<sup>11</sup> Despite having a substantial proportion of the population with high school and college degrees as compared to other African nations, Kenya is also among the African countries that have massive flight of human capital to developed countries. This implies a weak base of human capital for the country. If this trend continues undisturbed, the country will soon be deficient of skilled personnel in all areas. At the same time, the study hypothesizes that a well developed human capital base of a nation plays an important role in economic development. This therefore begs an investigation on the implications of brain drain on economic growth in Kenya.

## **1.2 Objectives of the Research**

The overall objective of this study is to assess the effects of brain drain on economic development in Kenya. Specifically, this study seeks to:

Examine the extent of brain drain in Kenya.

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Evans E.W., 'Reversing Africa's brain drain' New initiatives tap skills of African Expatriates' *Africa recovery*, vol. 17 No. 2, July 2003 p. 104

Kenya National Bureau of Statistics, *Basic Report: Kenya Integrated Household Survey 2005/6* (Nairobi: Ministry of Planning and National Development, 2007) p. 46



2. Find out the direct and indirect impacts of brain drain on economic development in Kenya.
3. Proffer suggestions on how to reverse the trend of brain drain in Kenya.

### **1.3 Justification of the Study**

This study has both policy and academic justifications.

#### **1.3.1 Policy Justification**

Currently, Africa's share in the world's scientific output has fallen from 0.5% to 0.3%, Africa is suffering a continuing brain drain of scientists, engineers and technologists; and Africa as a whole counts only 20,000 scientists or 3.6 % percent of the world total. The evidence is clear, 80 % of scientific research is concentrated in a handful of industrialized countries. The US Congressional Research Service computed in 1971-72 that the USA gained \$20,000 annually on each skilled migrant from the developing countries. In other words, it saved 883 million dollars in education costs, against a loss of 320 million dollars for the LDCs.

Such trends in human capital flight from the continent to developed countries have necessitated the establishment of concrete intervention strategies. It is against the backdrop that this study engages in an investigation of the implications of brain drain on economic development in Kenya. The findings of this study seek to settle the question of whether loss of human capital deters economic growth and whether it is worth to engage in expensive initiatives in order to reduce it.

#### **1.3.2 Academic Justification**

From the literature review section, it is apparent that there is literature dealing with the impact of brain drain on developing countries. However, the existing literature focuses on the region as a whole with few references to specific countries. This study

attempts to overcome this limitation. Besides, the vast literature on brain drain suffers from a lack of statistical data. This study therefore seeks to fill this gap by investigating the implications of brain drain on economic development in Africa with a specific focus on Kenya.

#### **1.4 Literature Review**

This section reviews literature on three themes that are relevant to the study. The first section investigates whether brain drain improves or deteriorates economic growth. Both theoretical as well as empirical studies of different scholars are examined to develop a debate on this matter. The second section analyzes different strategies that can be used to curb brain drain from developing countries. It brings up the various arguments for and against specific initiatives. Finally, the last section looks at particular case studies from the developing world. Three countries, Fiji, Nigeria and Ethiopia are studied.

##### **1.4.1 Brain Drain: Improves or Deteriorates Economic Growth**

Perhaps the oldest question in economics is why some countries are rich while others are poor. Economic theory has emphasized that differences in the educational levels of the population are an important part of the answer and that improved schooling opportunities should raise incomes in developing countries.<sup>12</sup> Yet, while there is little doubt that highly educated workers in many developing countries are scarce, it is also true that many scientists, engineers, physicians, and other professionals from developing countries work in Canada, the United States, and Western Europe. This phenomenon, often referred to as the "brain drain," was noticed as early as the 1960s and has been a contentious issue in the North-South debate ever since. One important implication of the brain drain is that investment in education in a developing country may not lead to faster

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<sup>12</sup> Adepouju A., *South-North Migration: The African Situation* op. cit., p. 12

economic growth if a large number of its highly educated people leave the country. Also, efforts to reduce specific skill shortages through improved educational opportunities may be largely futile unless measures are taken to offset existing incentives for highly educated people to emigrate.

Although a number of studies on the effects of brain drain have reported mixed views, economic theories (Neoclassical and Keynesian) suggest that it has both supply side and demand side effects on an economy. These effects can be both negative and positive. Neo-classical economists such as Bhagwati concluded in the 1970s that a loss of skilled workers would retard national growth.<sup>13</sup> Recent research drawing on "new or endogenous growth" theory adds the observation that an educated workforce, is one of a country's most valuable assets.

A number of empirical studies support the view that emigration creates a huge welfare loss to the home country. Samuelson contends that the supply side effects are normally reflected through the factors of production, in this case a reduction in the labour force. This results in an inward shift of the home country's production possibility curve (PPC). Thus, the productive capacity of the nation falls, which means that economic growth (real GDP) declines.<sup>14</sup>

In support of this contention Mountford holds that it may be hard to achieve and sustain a higher level of economic growth in the long-run, as continual emigration will mean that the work force will always be relatively inexperienced. Furthermore, the standard of education and health may drop as more quality teachers and medical personnel emigrate, leading to a general decline in economic welfare.<sup>15</sup>

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<sup>13</sup> Bhagwati Jagdish, 'The Brain Drain' *International Social Science Journal*, Vol. 28, No. 4, 1976 pp. 691-729: 714

<sup>14</sup> Samuelson P.A. and Nordhaus D., *Macroeconomics* 14<sup>th</sup> ed. (New York: McGraw-Hill, 1992) p. 218

<sup>15</sup> Mountford A., 'Can a Brain Drain be Good for Growth in the Source Economy?' *Journal of Development Economics*, Vol. 53 Issue No. 2, 1997 pp. 287-303: 295

Barro and Lee argue that the magnitude by which economic growth decreases is determined by the volume of emigration; the level of education and skills of the emigrants; the amount of money (savings/investment) emigrants take with them; and the scarcity factor is also important.<sup>16</sup> To expound on this, Barro and Sala-I-Martin hold that the more educated and skilled the emigrants are, the greater the impact on economic growth. His study found that a one-year increase in the average education of a nation's workforce increases the output per worker by between five and 15 percent.<sup>17</sup> Low levels of education not only slow economic growth but also damage the earnings of low-skilled workers, and increase poverty.

Similarly, Appleyard also asserts that emigration causes welfare losses to the home country. This is based on the view that the surplus pool of labour may not be able to successfully replace the highly skilled workers who have left, as they lack the necessary qualifications and experience. This is most likely to occur in highly skilled professions, particularly in the areas of health, education and other specialized services. He also argues that the efficiency (productivity) of those who replace the emigrants is generally lower.<sup>18</sup> This often results in a reduction in economic growth. Beine observes that in some instances the same level of economic growth may be achieved, but at a higher cost. Training replacement workers, so that earlier levels of economic growth can be obtained with greater efficiency, is likely to incur additional expense.<sup>19</sup>

On the other hand, Devesh posits that the demand side effects of brain drain affect both public and private consumption and investment spending. Brain drain places a strain

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<sup>16</sup> Barro Robert and Jong-Wha Lee, 'International Data on Educational Attainment: Updates and Implications' *CID Working Paper No. 42*, April 2000

<sup>17</sup> Barro Robert and Xavier Sala-I-Martin, *Economic Growth* (New York: McGraw-Hill, 1995) p. 60

<sup>18</sup> Appleyard Reginald, *The Impact of International Migration on Developing Countries* (Paris: OECD Publications, 1989) p. 28

<sup>19</sup> Beine M., Docquier F. and Hillel R., *Brain Drain and LDCs' Growth: Winners and Losers* (Bonn: Institute for the Study of Labour, 2003) p. 51

on government's ability to provide public services, in two ways. First he observes that though difficult to quantify, it is expected that government will have lost significant tax revenue through emigration. The reduction of the revenue base through decreases in incomes and corporate taxes, as well as other forms of tax collections (Value Added Tax) inevitably affects, amongst other things, government's allocations for education, health and law and order thus reducing the quality of public services.<sup>20</sup> This could have been used in upgrading infrastructure and technology in schools, hospitals and other vital public services. Massey and Taylor argue that although government may continually manage to increase allocations in priority areas, it will not be able to improve the quality of these services substantially. One of the reasons behind this could be that more money has to be spent on current expenditure (higher wages, training costs and hiring expatriate workers) rather than capital expenditure (buildings, equipment and technology).<sup>21</sup>

In addition, Beine et al note that private investment and consumption spending also decline, as emigrants normally take all their savings/investment when they leave the country.<sup>22</sup> For instance, a study of the Fiji National Provident Fund (FNPF) annual reports illustrated that high levels of emigration affected the already weak investment environment. It is estimated that between 1987-2001, Fiji citizens emigrating withdrew around \$242 million from FNPF, as part of their savings which had accumulated over the years.<sup>23</sup> This does not account for other forms of personal savings which individuals/families withdrew from the financial system. It is important to note that

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<sup>20</sup> Devesh Kapur and John McHale, *Give Us Your Best and Brightest: The Global Hunt for Talent and Its Impact on the Developing World* (Washington, DC: Center for Global Development, 2005) p. 9

<sup>21</sup> Massey Douglas and J. Edward Taylor; *International Migration: Prospects and Policies in a Global Market* (Oxford: Oxford University Press, 2004) p. 186

<sup>22</sup> Beine M., Docquier F. and Hillel R., *Brain Drain and LDCs' Growth: Winners and Losers* op cit., p. 47

<sup>23</sup> Fiji National Provident Fund annual Report 2000 available online at <http://www.fnpf.com.fj>

investment, and hence economic growth, would have been much higher if these savings (personal and via FNPF) had remained in the economy. While the impact of emigration on economic growth, through the investment channel, can be quantified somewhat, it is quite difficult to ascertain the impact through other channels, such as the labour market.

Although, Faini supports the contention that an outflow of human capital, just like monetary capital flight, is likely to adversely affect economic growth, he argues that the strength of feedback effects must be evaluated, as they can generate positive economic growth.<sup>24</sup>

In the same vein, some economists like Ahlburg<sup>25</sup> suggest that brain drain does not lead to a loss in economic welfare of the home country, mainly because there are other workers who can replace the emigrants quite easily. The primary assumption underpinning this view is that there exists a surplus pool of labour from which replacement workers can be drawn.

Lowell and Findlay 2002 also hold the view that brain drain has positive impacts too. They argue that "Optimal brain drain" theory finds some support for the notion that the possibility of emigration for higher wages induces more students in the sending country to pursue higher education. Many end up staying and improving the country's educational profile.<sup>26</sup>

Moreover, another study contends that feedback from expatriates includes today's more than \$32 billion in remittances sent to Latin America, a figure often larger than US aid or foreign direct investment. In a shrinking global village, expatriates also keep their social and professional networks, stimulating a reverse flow of innovations and

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<sup>24</sup> Faini Ricardo, *Is the Brain Drain an Unmitigated Blessing?* (Helsinki: WIDER, 2003) p. 36

<sup>25</sup> Ahlburg D., *Remittances and their impact; A Study of Tonga and Western Samoa* (Canberra: National Centre for Development Studies, 1991) p. 59

<sup>26</sup> Lowell Lindsay and Allan Findlay, *Migration of Highly Skilled Persons from Developing Countries: Impact and Policy Responses* (UK: International Labor Office, 2002) p.12

technological capacity. And many expatriates do return home with valuable experience and networks. Indeed, return migration may provide optimal returns to both sending and receiving countries.<sup>27</sup>

Many studies agreed that the remittances are primarily used for household expenditures, such as the construction of homes and consumption. These transfers have consequences at both the household level and at the level of the economy as a whole, affecting macroeconomic management, labour force participation, education and health outcomes, income distribution and patterns of household expenditure. Glytsos finds a positive relationship between growth and remittances using cross-country data, which shows that increased construction activity is correlated with remittances.<sup>28</sup> Lopez find that 'every dollar Mexican migrants send back home or bring back with them increases Mexico's GNP from anywhere between US\$ 2.69 and US\$ 3.17, depending on which household income group received the remittances',<sup>29</sup> and suggests that for every US\$ 2 billion in remittances that entered Mexico, there was over a US\$ 6.5 billion dollar production increase in agriculture, manufacturing and services. Spatafora<sup>30</sup> in contrast, finds that there is no direct link between real per capita output growth and remittances, using a panel of data for 113 developing countries find that remittances have a negative effect on economic growth.<sup>31</sup> They argued that receiving remittances might lower

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<sup>27</sup> Agencia EFE, 'Remittances to Latam, Caribbean' May 12, 2003 also available online at <http://www.quepasa.com/content/?c=104&id=145632>

<sup>28</sup> Glytsos N.P., 'A Macro econometric Model of the Effects of Migrant Remittances on Mediterranean Countries' Paper presented at ERF Conference on Population Challenges in the Middle East and North Africa: Towards the 21st Century, 2-4 November, Cairo, 1998.) p. 2-3

<sup>29</sup> Lopez Cordova, Globalization, Migration and Development: The Role of Mexican Migrant Remittances *Economia*, Fall 2005, pp. 217-56: 251

<sup>30</sup> Spatafora N., 'Two Current Issues Facing Developing Countries' In *World Economic Outlook* (Washington D.C.: International Monetary Fund, 2005) p. 4

<sup>31</sup> Chami R., Fullenkamp C. and Jahjah S., *Are Immigrant Remittance Flows a Source of Capital for Development?* (Washington: International Monetary Fund, 2003) p. 31

recipient households' labour force participation or savings rates and limit their job search efforts.

#### **1.4.2 Initiatives to Reverse Brain Drain in Africa**

To address the adverse economic effects of brain drain, a number of strategies have been put in place. As discussed in the previous section, brain drain causes labor shortages in critical and technical areas such as medical, education and other finance related disciplines should be addressed immediately. To remedy this situation, both the government and non-governmental organizations can institute various initiatives.

Experts on the continent are increasingly engaged in strategies and programmes to reverse the brain drain or retain skilled professionals at home. They include restrictive policies aimed at delaying emigration, such as adding extra years to medical students' training. Various tax proposals have been put forward as governments realize that the large numbers of citizens living outside their borders are a potential economic resource. Proposals range from one-time exit taxes to bilateral tax arrangements, which would require the receiving nation to tax citizens of another and remunerate the home country. Another strategy is the adoption of international agreements by industrial and developing nations under which wealthy countries pledge not to recruit skilled people from developing states. However, the two most popular strategies involve transferring skills through networks of professionals and intellectuals and the time-tested approach of repatriation.<sup>32</sup>

However, many African countries have acknowledged that efforts either to stem the emigration of highly skilled people or to attract them back to the home country are not always effective. The Diaspora option ("virtual participation"), which encourages

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<sup>32</sup> Johnson J. M. and Regets M., 'International Mobility of Scientists and Engineers To the US- Brain Drain or Brain Circulation?', *NSF Issue Brief* Vol. 98 No. 316 June, 1998 p. 2



highly skilled expatriates to contribute their experience to the development of their country without necessarily physically relocating emerged in the early 1990s as a more realistic strategy to alleviate the consequences of brain drain. There are some 41 expatriate knowledge networks in the world with the explicit purpose of inter-connecting the expatriates themselves and with their country of origin, 6 of which are linked to countries in Africa, including the Association of Kenyans Abroad; the Moroccan Association of Researchers and Scholars Abroad; the Association of Nigerians Abroad; the South African Network of Skills Abroad; and, the Tunisian Scientific Consortium.<sup>33</sup>

The South African Network of Skills Abroad (SANSA) is an example. Through its website, it invites professional South Africans to sign up. It reports that at least 22,000 graduates from five major South African universities resident abroad remain in touch with the universities. SANSA estimates that about 60 per cent of the country's expatriate graduates are located in six countries, with Australia, the UK and the US accounting for more than half of them. Looking at the nature of their skills, the group estimates that about 30 per cent of the University of Cape Town's contactable doctoral graduates are living overseas. They comprise significant proportions of the university's graduates in medicine, commerce, education and engineering, all areas in which South Africa has an acute shortage of skills.<sup>34</sup>

In addition, Wescott holds that attractive remuneration packages could be provided to former residents to draw their services back into the country.<sup>35</sup> However, Chopra argues that one cannot simply state that “increase the pay of our professionals and

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<sup>33</sup> Shikwati J. S., *Brain drain versus Africa's economic woes* op. cit., p. 17

<sup>34</sup> Evans E.W., 'Reversing Africa's brain drain' New initiatives tap skills of African expatriates' *Africa Recovery*, vol. 17 No. 2, July 2003 p. 1

<sup>35</sup> Wescott Clay and Jennifer Brinkerhoff, *Converting Migration Drains into Gains: Harnessing the Resources of Overseas Professionals* (Manila: Asian Development Bank, 2006) p. 127

they will come flooding back". He maintains that developing countries cannot compete with the western world because their economy cannot support it.<sup>36</sup>

Government could also review immigration policies to allow dual citizenships. However, these are only temporary measures.

Tapsoba and others argue that countries can mitigate the push factors. For example, the government can ensure political stability. This may include successful completion Elections, the removal of trade sanctions and addressing several contentious issues in the country's constitutional framework.<sup>37</sup>

Palmer contends that sincere efforts to create a national identity that encompasses all citizens must be made. This program will assist in nation building and reduce any racial and religious divides that separate the people and threaten stability.<sup>38</sup> Moreover, the government must continue to promote and practice accountability and transparency to foster better relationships between government and the public.

Another strategy, as suggested by Clay, is the adoption of international agreements by industrial and developing nations under which wealthy countries pledge not to recruit skilled people from developing states. However, the two most popular strategies involve transferring skills through networks of professionals and intellectuals and the time-tested approach of repatriation.<sup>39</sup>

Other programmes to counter the brain drain involve the physical relocation of expatriate Africans either to their home countries or elsewhere on the continent. The

Kenya-based Research and Development Forum for Science-Led Development in Africa

<sup>36</sup> Chopra S. K., *Brain Drain: Causes, Consequences and Solutions* 1986 (New Delhi: Lancer International, 1986) p. 176

<sup>37</sup> Tapsoba S., S. Kassoum, P. Houenou, B. One, M. Sethi and J. Ngu., *Brain Drain and Capacity Building in Africa* op. cit., p. 53

<sup>38</sup> Ransford W. Palmer, *In Search of a Better Life: Perspectives on Migration from the Caribbean* (New York: Praeger Publishers, 1990) p. 40

<sup>39</sup> Clay Wescott and Jennifer Brinkerhoff, *Converting Migration Drains into Gains: Harnessing the Resources of Overseas Professionals* (Manila: Asian Development Bank, 2006) p. 1

(RANDFORUM) has been exploring ways to repatriate African professionals and intellectuals, as requested in 1999 by the Presidential Forum on the Management of Science and Technology in Africa, a grouping of African heads of state. Another RANDFORUM project aims to relocate professionals from "distressed countries" -- those that are faltering economically or politically, such as Liberia or Somalia -- to where they can be productive. Rather than confine professionals and intellectuals from such countries to refugee camps, they are utilized elsewhere and returned once the situation in their countries normalizes.

A major limitation, however, is that such operations require large sums of money. Some expatriates may wish to be repatriated with their entire families. Others may request salaries comparable to what they earn in their host countries, along with up-to-date technological resources. Another limitation is that repatriation only allows for the return of the individual expatriate and not the knowledge networks to which he or she may belong.

Dhananjayan contends that if brain drain is not always bad, then limiting the movement of highly skilled people may not be necessary. Indeed, except for extreme cases, measures that restrict mobility are not the most effective responses to the causes or consequences of brain drain. In particular, measures aimed at reducing the recruitment of developing-country professionals in several sectors (notably health care but also in education) in some developed countries may only be a band-aid solution — and a bad one at that — for several reasons.<sup>40</sup>

### **1.4.3 Case Studies of the Effects of Brain Drain on Developing Countries**

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<sup>40</sup> Dhananjayan Sriskandarajah, 'Reassessing the Impacts of Brain Drain on Developing Countries' August 2005 *Institute for Public Policy Research*

The cross-border movement of brains especially from developing to developed countries has no doubt been a major source of concern in Africa for some decades now. Statistical information on the Ethiopian brain drain, as explained below, tends to be anecdotal, confusing and sometimes conflicting. There are no reliable, long-term macro statistics for documenting the problem.

The anecdotal information on brain drain in Ethiopia is consistently depressing, especially in the areas of science, engineering and medicine. During the Derg era from 1980 to 1991, 22,700 Ethiopian students went abroad and only 5,777 or about 25 percent returned to Ethiopia. In addition, a study of four government organizations, including Addis Ababa University (AAU), indicated that out of every 100 professionals sent overseas for training between 1982 and 1997, 35 did not return. In particular, the AAU department of mathematics alone lost 17 of its staff. They all have a Ph.D. and they all teach in American universities. Twenty staff from the faculty of physics went abroad for study in the 1970s and 1980s. All 20 remained outside the country.<sup>41</sup> A third of the 2,491 general practitioners trained between 1988 and 2001 have already left the country seeking better employment opportunities in North America, Europe and South Africa. There were 1,366 physicians working throughout Ethiopia in 2001. This works out to about one physician for 47,000 persons. By comparison, in 1996 there were 1,483 or nearly ten percent more, physicians in the country. Ethiopia can ill afford this continuing loss of trained medical personnel.

The ILO survey confirmed the existence of the supply side effects in Fiji's labour force participation figures. During the 1980-1987 period when emigration levels were low, growth in the labour force averaged around 3.0 percent per annum. However, after

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<sup>41</sup> Aredo D. and Zelalem Y., 'Skilled Labor Migration from Developing Countries: An Assessment of Brain Drain from Ethiopia' In Senait Seyoum and Alemayehu Seyoum (eds.), *Human Resources Development in Ethiopia* (Addis Ababa: Ethiopian Economics Association, 1998) pp. 26-50: 39

1987, significant increases in emigration generally led to a slowdown in the growth of the labour force, to an average of 2.0 percent per year. The annual employment rate for the period 1980-1987 averaged 2.8 percent, while after 1987 the annual average was 2.3 percent. During the same period (1980-2001), the unemployment rate was generally been stable at 5-7 percent. This suggests that there existed a degree of surplus labour in Fiji.<sup>42</sup> This surplus pool of labour adequately filled the vacuum created by emigration in certain professions such as administration, sales, tourism services and production. However, there were some critical areas, such as the medical profession, teaching and other specialized services, where labour shortages were most acute and still exist today. This is because there is already a limited supply of workers in these areas. In addition, there is a time lag between education/training and the hiring process for highly skilled professions.

Furthermore, the efficiency (productivity) and quality of these services are likely to drop and this could lead to a general decline in the country's welfare. This implication was reflected in the 2000 UNDP Human Development report, where Fiji ranked 66th out of 174 countries in its Human Development Index from 44th in 1998.

During the decades of the 1980s and the 1990s, Nigerian universities experienced the most devastating impact of the brain drain problem. It all started in the late seventies and early eighties when medical professionals began to migrate to the Middle East (Saudi Arabia in particular) in search of greener pastures. The introduction of the Structural Adjustment Programme (SAP) by the Ibrahim Babangida military regime in the second half of the eighties further compounded the problem, as many other professionals in the academia became part of the brain drain statistics. The attempt by the same regime to stem the tide of brain drain through the instrumentality of the 1992 FGN-ASNU (for

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<sup>42</sup> Mohanty M., 'Human Capital Resource Outflow and Development in Fiji islands' *Proceedings of Pan-Pacific Conference XIX*, May 29- 31, 2002 pp. 363-65: 363

ASUU) Agreement could not achieve the expected results mainly because few years later, the Sani Abacha military regime repudiated some fundamental aspects of the agreement. And ever since then, the story has remained the same even attempts are being made by the New Partnership for Africa Development (NEPAD) to turn the brain drain problem into brain gain.<sup>43</sup>

During those two mentioned decades, many Nigerian academics left for North America, Europe, Australia, Asia, Middle-East and other parts of Africa especially the Eastern and Southern Africa. It is estimated that more than 2,000 Nigerian doctors work in the United States even though there continues to be a critical need for health professionals in Nigeria. Moreover, about 10,000 Nigerian academics are employed in the United States alone.<sup>44</sup>

It is clear from this anecdotal information that the brain drain has had and continues to have a significant negative impact on Ethiopia's ability to fill highly skilled positions in all fields of specialization. The result is particularly severe in medicine, the sciences and engineering. Although the magnitude of the problem seems to have decreased since the fall of the Derg, it continues to be sufficiently serious as to merit urgent attention.

### **1.5 Theoretical Framework**

This study uses as its guideline the new economic growth model also known as the endogenous growth theory. This theory was developed Paul Romer and Paul Ormerod in 1980 as a response to the Robert Solow's neo-classical growth model. The new Growth theory argues that economic growth is generated from within a system as a direct result of internal processes. More specifically, the theory notes that the enhancement of a

<sup>43</sup> Adepoju A., *South-North Migration: The African Situation* (Geneva: IOM, 1990) p. 79

<sup>44</sup> Bankole Oni, 'Capacity Building Effort and Brain Drain in Nigerian Universities' Report for the Nigerian Institute for Social and Economic Research, May 2002 op cit

nation's human capital will lead to economic growth by means of the development of new forms of technology and efficient and effective means of production.<sup>45</sup>

This view contrasts with neoclassical economics, which contends that technological progression and other external factors are the main sources of economic growth.<sup>46</sup> Supporters of endogenous growth theory argue that the productivity and economies of today's industrialized countries compared to the same countries in pre-industrialized eras are evidence that growth was created and sustained from within the country and not through trade.

By broadening the concept of capital to include human capital, the new endogenous growth model argues that the law of diminishing-returns to-scale phenomenon may not be true.<sup>47</sup> Human capital refers to the stock of skills and knowledge embodied in the ability to perform labor so as to produce economic value. In simple terms, what this means is that if the firm which invests in capital also employs educated and skilled workers who are healthy, then not only will the labour be productive but it will be able to use the capital and technology more efficiently as well. This will lead to a "Hicks neutral" shift in the production function and thus there can be increasing rather than decreasing returns to investments. In other words, technology and human capital are both "endogenous" to the system.

This theory also argues that improvements in productivity can be linked to the pace of innovation, which brings forth technological progress and the extra investment in human capital.<sup>48</sup> Therefore, the rate of technological progress should not be taken as a

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<sup>45</sup> Aghion P. and Howitt P., *Endogenous Growth Theory* (Cambridge, Mass.: MIT Press, 1998) p. 4

<sup>46</sup> Robert Solow, *Growth Theory: An Exposition* (Oxford: Oxford University Press, 2000) p. 31

<sup>47</sup> Stewart T.A., *Intellectual Capital: the New Wealth of Organisations* (New York: Currency and Doubleday, 1999) p. 28

<sup>48</sup> Hirschman A. O., *The Strategy of Economic Development* (New Haven: Yale University Press, 1958) p.

given condition in a growth model; appropriate government policies can permanently raise a country's growth rate particularly if they lead to a level of competition in markets and a higher rate of innovation. For example, subsidies on research and development or education increase the growth rate in some endogenous growth models by increasing the incentive to innovate.

The aforementioned tenets of this theory are in agreement with the major hypothesis of this study: the flight of highly skilled professionals to industrialized countries is one of Africa's major development constraints.

However, critics like Parente contend that the new growth theory has proven no more successful than exogenous growth theory in explaining the income divergence between the developing and developed worlds.<sup>49</sup> Omar explains that the endogenous growth theory is based on a misperception of how science and technology are acquired and diffused. In particular, it is incorrect to assume that knowledge is freely available. Any knowledge which has economic value has to be accessed via the brains of experts who are members of the relevant 'invisible college' and are rivalrous. It therefore has the characteristics of a private good which can be left to conventional economic incentives to supply.<sup>50</sup> Despite the shortcomings of this theory, it serves as an appropriate guide to the study.

## 1.6 Hypotheses

The study is guided by the following hypotheses:

- Weakness in human capital and particularly skill deficiency is a drag on investment and growth in Africa.

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<sup>49</sup> Parente Stephen, 'The Failure of Endogenous Growth' *Knowledge Technology and Policy* Vol. XIII, No. 4, 2001 pp. 13-29:16

<sup>50</sup> Omar Al-Ubaydli and Terence Kealey, 'Endogenous Growth Theory: A Critique' *Economic Affairs* Vol. 20 Issue No. 3, 2000 pp. 10-13:11



- The flight of highly skilled professionals to industrialized countries deteriorates economic development.
- Continuous loss of skilled and experienced professionals is attributed to poor economic conditions.

### 1.7 Definitions

**Migration** denotes any movement by humans from one locality to another, sometimes over long distances or in large groups. Humans are known to have migrated extensively throughout history and prehistory. There are two main types of migration: first, internal migration, i.e. migration within one country, and secondly international migration, which means the movement from one country to another.

**Immigration** refers to the movement of people between countries. While the movement of people has existed throughout human history at various levels, modern immigration implies long-term permanent residence. Immigration across national borders in a way that violates the immigration laws of the destination country is termed illegal immigration. Under this definition, an illegal immigrant is a foreigner who either illegally crossed an international political border, whether by land, water, or air, or a foreigner who legally entered a country but overstays his/her visa in order to live and/or work therein. Seasonal labour migration, while generally non-permanent in nature (typically for periods of less than a year), is often treated as a form of immigration.

**Emigration:** To leave one country or region to settle in another.

**Brain Drain:** Brain drain is also known as human capital flight and therefore it means the emigration of trained and talented individuals to other nations or jurisdictions. It parallels the term 'capital flight' which refers to financial capital that is no longer invested in a country where its owner lived or earned it. Investment in higher education is

therefore lost when an individual leaves his country and does not return, and also the social capital the individual has been a part of is reduced by his or her departure.

The migration brain drain is the flight of skilled workers to developed nations and the terminal brain drain is the severe negative impact of HIV/AIDS where relatively substantial numbers of people can at least read and write or with high school or college diplomas, and with relatively active economies die.

**Human Capital:** It is a measure of the economic value of an employee's skill set. This measure builds on the basic production input of labor measure where all labor is thought to be equal. The concept of human capital recognizes that not all labor is equal and that the quality of employees can be improved by investing in them. The education, experience and abilities of an employee have an economic value for employers and for the economy as a whole.

**Economic Development:** Economic development refers to a sustainable increase in living standards. It implies increased per capita income, better education and health as well as environmental protection. From a policy perspective, economic development can be defined as efforts that seek to improve the economic well-being and quality of life for a community by creating and/or retaining jobs and supporting or growing incomes and the tax base.

## **1.8 Methodology of Research**

This is a descriptive survey study aimed at establishing the impact of brain drain on economic growth in Africa. It however, focuses specifically on Kenya. It will rely on both primary and secondary sources of data. Primary sources will include personal interviews.

The sampling population encompasses skilled personnel such as nurses, teachers, engineers and other professionals in Kenya were interviewed to give their views on causes, effects and strategies to mitigate of brain drain in Kenya. The study targeted 100 professionals in the nursing, teaching, engineering sector. This does not mean that other professions such as administration, sales, tourism services and production are not affected. As indicated in the literature review, the surplus pool of labour can easily fill the vacuum created by emigration in such professions but others like medical, teaching and other specialized services are critical areas which present acute labour shortages.

The main instrument in Data collection was semi-structured questionnaires. The questionnaires either will be dropped and picked later or emailed to the respondents. Personal interviews will also be carried out.

Collected quantitative data were analyzed by the use of descriptive statistics and will be represented by means of the SPSS package and presented through percentages, means, standard deviations and frequencies. The information was displayed by use of bar charts, graphs and pie charts.

The following dissemination strategies were used; submit completed research project to university library and other libraries used during the research period. While thanking study participants for their involvement, their letters will include research findings in brief.

On the other hand, secondary data collection entailed the analysis and review of books, journals, papers and unpublished works. Materials from the central bureau of statistics, reports of the ILO, World Bank and African Capacity Building Foundation were reviewed and information from their websites analyzed. This secondary data supported the information received from interviews.

## **1.9 Organization of the Chapters**

### **Chapter one: Introduction**

This chapter provides an insight into the structure of the dissertation. It lays the background in which the introduction, statement of the problem, objectives, hypotheses, justification, literature review, theoretical framework, research methodology, limitation, funding and summary of proposed chapters are outlined.

### **Chapter two: Brain Drain in Kenya**

This chapter provides the background of the Brain Drain situation in Kenya, its emergence and trends. It also investigates the extent of Brain Drain in the country, the push and pull factors that facilitate the intellectuals to leave the country to live and work abroad.

### **Chapter three: Kenya's Economic Development**

Chapter three assesses historically economic development in Kenya in order to find links with human capital flight. Besides, it brings up the theoretical views of the role of human capital on economic growth as studies by other scholars.

### **Chapter Four: A Critical Analysis of the Implications of Brain Drain on Economic Development in Kenya**

Chapter four critically analyzes the implications of brain drain on economic growth. This is done by assessing the data collected in the previous chapter in the light of the hypotheses that the consequence of an increase in brain drain is a slower economic growth rate for any country.

### **Chapter five: Conclusions and Recommendations**

This chapter provides the conclusions of the study, giving recommendations and suggestions in the area of brain drain.

## CHAPTER TWO: BRAIN DRAIN IN KENYA

### Introduction

Historically, wars between nations, and later between people, have always been about land and its appropriation. However, this realistic tendency of acquiring territorial power has been overshadowed by other principles of power such as economic power and population among others. Consequently, a new type of war has appeared the war about technology and its control. This includes the control of a state's human resources.<sup>51</sup>

Brain drain is a social index that is difficult to measure. Even so, this chapter attempts to investigate the extent of Brain Drain in Kenya. It first provides the background of the Brain Drain situation in Kenya, its emergence and trends. It also evaluates the push and pull factors that facilitate the intellectuals to leave the country to live and work abroad.

Although the research is largely based on qualitative information, it provides a vehicle for discussing these issues in the hope of strengthening the evidence on the magnitude and consequences of the crisis while making a plea for concerted action among stakeholders to address the crisis.

### 2.1 Brain Drain in Kenya: Emergence and Trends

As observed above, the current statistical evidence of brain drain in Kenya is weak due to generally non-existent personnel information systems, but the qualitative and anecdotal evidence is quite revealing.

The emphasis on education as the route to national development and upward social mobility is evident in Kenyans' insatiable thirst for higher education opportunities

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<sup>51</sup> Jean-Baptiste Meyer, 'The 'Brain Drain: New Aspects of the South/North Exodus' *the Courier* No.187, July-August 2001, pp. 46-47

abroad. Colonialism transformed Kenya's economy from a primary base of subsistence agriculture to commercial agricultural production, some modern industrial manufacturing, and other cash-driven economic activities. In the new cash economy, education, even at the most basic level, became a major determinant of upward social and economic mobility. Formal education and literacy provided access to coveted salaried white and sometimes blue-collar employment opportunities in the public and private sectors.

Throughout the 1950s, 1960s, and 1970s Kenyans were engaged predominantly in circular migration in search of higher education and advanced training abroad, which was then later applied to nation-building through employment in Kenya.<sup>52</sup> Some of the graduates from this period include President Kibaki, who, like Kenyatta before him, attended the London School of Economics. Several cabinet members and top officials in the current Kenyan government also studied in Europe, North America and even Asia.

In the 1980s and 1990s, this trend shifted to a one-way mass exodus to the political, physical, and economic stability of foreign lands. A report by the Institute for International Education and the US State Department shows that among African countries sending students to the US in the 2001-2002 school year, Kenya led with 7,097 students, followed by Nigeria (3,820), Ghana (2,672), Egypt (2,409), and South Africa (2,232).<sup>53</sup> Faced with great uncertainty at home, many Kenyan families that could afford the initial financial costs began to view the sending of one or more of their members abroad on a long-term or permanent basis as an investment or a form of economic insurance.

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<sup>52</sup> Sharon Stichter, 'Migrant Labour in Kenya: Capitalism and African Response 1895-1975' *Canadian Journal of African Studies* Vol. 18, No. 2, 1984, pp. 445-447

<sup>53</sup> Davis Todd, *Open Doors: Report on International Educational Exchange* (New York: Institute of International Education, 2003) p. 35

The economic hopelessness of the late 1980s and 1990s, as well as violent politically motivated ethnic conflicts around the 1992 and 1997 general elections, catalyzed the massive departure of doctors, lawyers, university lecturers, and other highly skilled professionals to Western Europe and countries such as South Africa, Botswana, Uganda, Australia, Canada, and the United States. For instance, the number of Kenyan citizens in Germany was only 576 in 1980, but had doubled to 1,222 by 1990 and ballooned to more than 5,200 by the end of 2001 and 7,840 by 2006.<sup>54</sup>

Many Kenyans also began pursuing opportunities in low-skilled positions as bus drivers, domestic servants, cruise ship attendants, and security guards in Gulf countries such as Saudi Arabia, Qatar, and Bahrain. Kenyan high school and elementary school teachers were recruited throughout the 1990s to fulfill shortages in places such as the Comoros Islands, Seychelles, Rwanda, Burundi, and the Congo. The Kenyan government has not yet established standards to ensure the adequate training and protection of these workers before their departure and during their stints abroad or at sea.<sup>55</sup>

Kenyans studying or working abroad could be relied upon to send vital remittances to their relatives; some of which went into helping maintain previous standards of living as the economy declined further, and some into small business ventures or other development activities. Although there are no reliable figures about the size of migrant remittances to Kenya, their role in sustaining the foreign exchange-strapped Kenyan economy is believed to have been significant throughout the 1990s, when most bilateral and multilateral donors withheld aid to protest the slow pace of economic and political reforms by the Moi government.

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<sup>54</sup> Cassandra R. Veney, *Forced Migration in Eastern Africa* (Basingstoke: Palgrave Macmillan, 2006) p. 101

<sup>55</sup> Daley Patrica, 'The Migration Experience in Africa' *African Affairs* Vol. 95, 1996 pp. 622-623



Despite the absolute numbers of migrants being under-recorded the official data are suggestive in other ways. The trend lines are probably accurate in showing peaks during periods of political instability such as during the introduction of SAPs, 1992 and 1997 election violence among others.

Today, one can find Kenyans in all parts of the developed world or rich nations, from Australia to Canada. According to Okoth, as of 2001, there were 47,000 Kenyans in the United States, 20,600 in Canada, 15,000 in the United Kingdom, 6,900 in Australia, 5,200 in Germany and 1,300 in Sweden.<sup>56</sup>

The category that suffers most from brain drain in Kenya is Education. Other than attracting possibilities for early retirement, it brings with it the buoyant demand for teachers in neighboring countries. The replacement rates in this sector are high, particularly in nursery and primary schools. However, in secondary and throughout the tertiary sector notable gaps in recruitment are visible. Again, the category is too undifferentiated and includes valuable academics with distinctive skills and international reputations and economists trained to a high professional level.<sup>57</sup>

The educational sector of Kenya has faced threats due to massive exodus of highly qualified teachers to lucrative markets not only in the developed world but also to other developing countries such as Sudan, South African, Seychelles, Rwanda among others. The most affected are universities and other institutions of higher learning. For instance, about 20 senior lecturers and professors have left Kenyatta University - one of Kenya's leading teachers' training institutions. Most of these lecturers are doctoral degree holders heading for Rwanda and other Southern African universities. The World Bank's

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<sup>56</sup> Okoth Kenneth, *Kenya: What Role for Diaspora in Development?* (Washington, D.C.: Migration Policy Institute, 2003) p. 29

<sup>57</sup> Harber Clive, *Education, Democracy and Political Development in Africa* (UK: Sussex Academic Press, 1997) p. 83

publication: 'Staff loss and Retention at Selected African Universities,' concluded that full professors and experienced doctoral degree holders could be an endangered species they are highly marketable in the international academic market.<sup>58</sup>

Declining academic salaries, when coupled with more frequent university closures linked to increasing student unrest and government intervention on a number of campuses, have prompted numerous university staff to forsake their academic calling. The World Bank notes that some 23,000 qualified academic staff are emigrating from Africa each year in search of better working conditions. It is estimated that 10,000 Nigerians are now employed in the United States alone. More often, however, it is a neighboring country which beckons. South Africa attracts staff from Malawi and Zambia, and the universities of Botswana and Swaziland attract Zimbabweans.<sup>59</sup>

Besides migrating to other countries, this sector has also experienced internal brain drain whereby educationists leave the profession for a better paying one. In 2007, hundreds of teachers abandoned the chalk for jobs in the private sector and the public service. The Kenya Secondary School Heads Association said nearly 600 teachers left the classroom for the Public Service in the last half of the year. Most of these have been absorbed by the Ministry of Youth Affairs, while others have been employed as quality assurance officers. Others have settled in private academies, financial institutions, insurance companies, the media and non-governmental organizations.<sup>60</sup>

The other severely affected sector is the medical profession. There is now a widespread agreement that the primary health care (PHC) approach is the right way forward in health provision. Health personnel should therefore be equipped with the 'knowledge,

<sup>58</sup> Robert Blair and Josephine Jordan, *Staff Loss and Retention at Selected African Universities: A Synthesis Report* (Washington DC: World Bank, 1994) p. 65

<sup>59</sup> Massey Douglas and J. Edward Taylor; *International Migration: Prospects and Policies in a Global Market* (Oxford: Oxford University Press, 2004) p. 14

<sup>60</sup> Peter Ngare, 'Kenya: 600 Teachers Quit Classroom for Better Jobs' *The Daily Nation* 5 May 2008

competence and attitude to respond comprehensively to the health care needs of the population'.<sup>61</sup> Despite this consensus, the prestige, financial rewards and portability of high-tech, research and laboratory-intensive medicine are powerful incentives to emigration. Information from medical schools in the Caribbean suggests that about one-third to one-half of the graduating classes are emigrating, either temporarily or permanently. Some newly qualified personnel go abroad to enrich their experience, pay off their debts and start some savings in a hard currency.<sup>62</sup> Such temporary emigration is acceptable and may even be positive, but the detailed inward and outward flows of medics are unknown and need further detailed study.

Scientists have warned of a looming exodus of health experts from Kenya and other African countries to meet demand in the West. Though Britain enacted codes to slow the poaching of nurses from poor countries, many nurses still slip through. Today, Britain requires 25,000 more physicians and 250,000 more nurses than it did in 1997. The United States faces a nursing shortfall of 1 million. African governments that invest in training nurses may not reap the benefit.<sup>63</sup>

Arthur Okwemba points out that: "Evidence that some 400 local nurses are preparing to move to the US this year alone has caused concerns in the Ministry of Health." Okwemba noted that out of the 15 scientists that Prof Onesmo Ole-MoiYoi, chairman of the Institute of Molecular and Cell Biology in Africa, supervised for doctorate degrees, only one, working with Kenya Medical Research Institute at the time,

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<sup>61</sup> Robin Cohen, Brain Drain Migration also available at

<http://www.queensu.ca/samp/transform/Cohen1.htm>

<sup>62</sup> Ransford W. Palmer, *In Search of a Better Life: Perspectives on Migration from the Caribbean* (New York: Praeger Publishers, 1990) p. 72

<sup>63</sup> Migration News, Southern Africa Migration Project available online at

<http://www.queensu.ca/samp/migrationnews/2004/dec.htm>

remained in the country. The rest have moved to Europe or America<sup>64</sup> As of 2005, Kenya was short of 48,000 nurses, and nurses there provide 80% of the healthcare.<sup>65</sup> On the other hand, the former Minister of Health Ms Ngilu revealed that Kenya had only been retaining 10% of the medical staff that qualify there. Out of 6,000 doctors trained in Kenya, public hospitals had only about 600.

According to the World Health Organization, up to 20,000 highly qualified nurses and doctors are leaving Africa each year. In Kenya, 3,390 nurses have left for richer nations over the past five years. Many will pay fees equal to 10 months of wages to private recruitment firms in order to qualify and register to work abroad. According to the World Health Report 2006, about 1,213 nurses and midwives trained in Kenya work in seven OECD countries, that is, 3.3% (1213/37113) of total number of nurses and midwives working in Kenya.<sup>66</sup>

This causes a critical shortage of medical experts in the country. The table below indicates that in 2002, Kenya's estimates of health personnel was 1 nurse to a thousand patients and one doctor to five thousand patients. Although this ratio is so low, this WHO study illustrates that Kenya is among the African countries with best ratios with the worst being one nurse to 10,000 patients and one doctor to 30000 patients.

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<sup>64</sup> Okwemba Arthur, 'Flight of Nurses Raises Concern: Ministry Now Worried Over the Brain Drain,' *The Daily Nation* June 2, 2003

<sup>65</sup> Remington Robert, 'Officials Accuse West of Stealing Developing World's Nurses,' *Calgary Herald*, Canada October 30, 2005 p. A-3

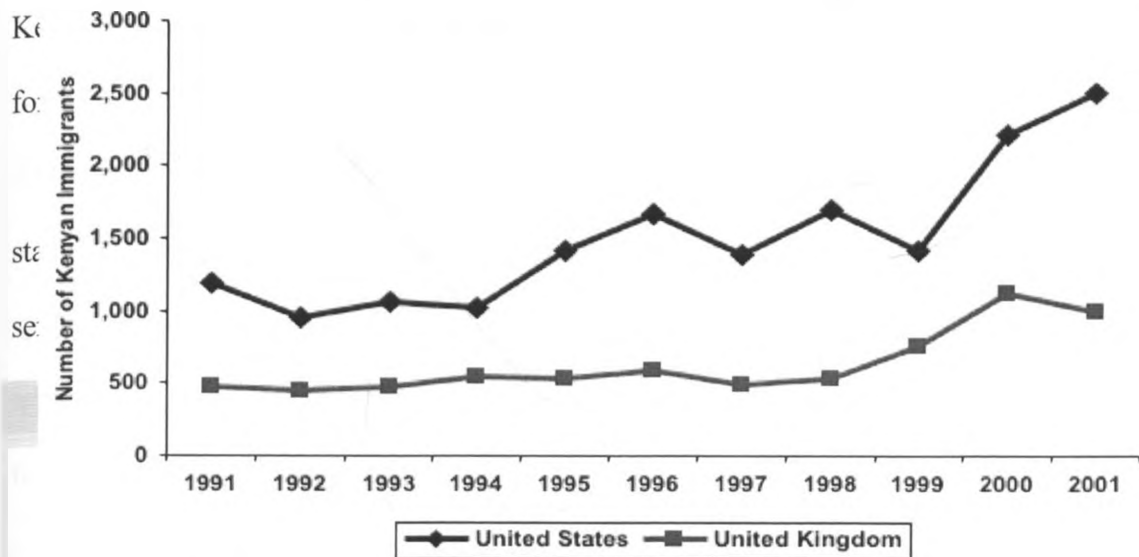
<sup>66</sup> World Health Organization, *The World Health Report 2006: Working Together for Health* (Geneva: WHO, 2006) p. 206

**Table 1: African Countries by Population per Health Worker Ratios, late 1990s**

<b>Population per doctor</b>	<b>Countries</b>
1 per 30,000 or more	Burkina Faso, Central African Republic, Chad, Eritrea, Ethiopia, Gambia, Malawi, Mozambique, Niger, and Tanzania (10)
1 per 20,000	Angola, Benin, Comoros, D.R. Congo, Lesotho, Mali, Rwanda, Sierra Leone, Somalia, Togo, Uganda, and Zambia (12)
1 per 10,000	Burundi, Cameroon, Côte d'Ivoire, Djibouti, Ghana, Madagascar, Senegal, Sudan, and Swaziland (9)
1 per 5,000	Botswana, Cape Verde, D.R. Congo, Gabon, Equatorial Guinea, Guinea, Guinea-Bissau, Kenya, Mauritania, Mauritius, Namibia, Nigeria, Sao Tome and Principe, Seychelles, Swaziland, South Africa, and Zimbabwe (17)
<b>Population per nurse</b>	<b>Countries</b>
1 per 10,000 or more	Central African Republic, Gambia, and Mali (3)
1 per 5,000	Benin, Burkina Faso, Chad, Eritrea, Madagascar, Niger, Senegal, Togo, and Uganda (9)
1 per 2,000	Cape Verde, Comoros, Côte d'Ivoire, D.R. Congo, Equatorial Guinea, Ghana, Guinea, Lesotho, Sierra Leone, and Sudan (10)
1 per 1,000	Angola, Botswana, Djibouti, D.R. Congo, Guinea-Bissau, Kenya, Mauritania, Mauritius, Namibia, Nigeria, Sao Tome and Principe, Seychelles, South Africa, Tanzania, Zambia, and Zimbabwe (16)

Source: Estimates of Health Personnel: Physicians, Nurses, Midwives, Dentists and Pharmacists Around 1998, WHO (2002)

This argument is justified by the happenings in the country. For instance, in Nairobi's 1,800-bed Kenyatta National Hospital, the nurse-patient ratio is 3:80, and nurses work in darkened wards using outdated equipment. Moreover, the Government of



Source: Migration Information Source, Global Data Center.

The above figure shows that the number of Kenyan immigrants to the US and UK has been increasing proportionally as the years go by. However, the immigrants' number lowered in 1992 but steadily increased since then up to date.

## 2.2 Factors Facilitating Brain Drain in Kenya

Sub-Saharan Africa, like most other developing regions, has been integrated into the global economy primarily as a source of cheap primary goods and cheap labour. Initially, African labour was exploited within colonial boundaries but after World War II African labour was often actively recruited by ex-colonial European powers as competition for more expensive European labour. For example, France gave its former African colonies favoured nation status and formed agreements with such African states as Senegal, Mauritania, and Mali to promote labour migration. By 1960, about 20 000

<sup>47</sup> Pamela McQuide, 'Where Have All Workers Gone? The Extent of the Global Health Care Worker Shortage' Paper presented at the 7<sup>th</sup> Annual Global Health Mini-University Conference October 5, 2007

Sub-Saharan Africans were in France. The British were less hospitable to immigrants from their former African colonies. Beginning in 1962, Africans in England were denied full social and political rights. They were subject to four immigrant control and three race relations acts that gradually withdrew their citizenship rights. Pass laws and voucher systems were introduced in order to “terminate black settler immigration and to introduce repatriation. In 1971, the British passed an immigration act to expressly limit immigration from its former colonies.<sup>68</sup>

The problem is that Africans who completed their studies in Europe and the United States are not returning to Africa. Since one in three African professionals will like to live outside Africa, African universities are actually training one third of their graduates for export to the developed nations. We are operating one third of African universities to satisfy the manpower needs of Great Britain and the United States. The African education budget is nothing but a supplement to the American education budget. In essence, Africa is giving developmental assistance to the wealthier western nations, which makes the rich nations richer and the poor nations poorer.<sup>69</sup>

The human resource problem in sub-Saharan Africa (SSA) has reached crisis proportions in many countries.<sup>70</sup> Although the gravity of the problem varies across the region, the situation in some countries is so grave that urgent action is needed. A complex set of factors has contributed to this problem, some exogenous, such as the austere fiscal measures introduced by structural adjustment. But endogenous factors are also to blame, including misdirected human resource and training policies, weak institutions, and inappropriate structures. Identification and analysis of these causes of emigration of

<sup>68</sup> April Gordon, 'The New Diaspora-African Immigration to the United States' op cit, p. 80

<sup>69</sup> Sassen Saskia, *The Mobility of Labor and Capital* (Cambridge: Cambridge University Press, 1988) p. 12

<sup>70</sup> Huddart J; Picazo OF, *The Health Sector Human Resource Crisis In Africa: An Issues Paper* (Washington, D.C., Academy for Educational Development, 2003) p. 40

highly qualified skilled and trained scientific and technological personnel is essential for reformulating effective national and international policies that would focus on creating host environment in developing countries for skilled manpower.

This section will outline the issues and summarize recommendations pertinent to both redressing the push and pull factors as well as promoting the implementation of the additional steps.

The post – World War II expansion of the industrial economies of Western Europe and North America (especially the United States) has led to immigration policies in these countries designed to meet a burgeoning demand for cheap labour. Globalization has made possible a massive transfer of resources like technology and capital; labour has become another form of large-scale resource transfer; Although more than half of recent international migration flows are between developing countries, the flow from the Third World to industrial nations has grown to unprecedented levels. That developed countries are a magnet for the world's migrant is evident from statistics. In 1990, half of the world's migrants (excluding those naturalized, which would increase even more than the number in developed countries) were in industrial countries: 15-20 million were in Western Europe, 15-20 million were in North America, and 2-3 million were in the industrial nations of Asia (e.g. Japan, Taiwan).<sup>71</sup>

This globalization phenomenon has not escaped the attention of Deepak Nayyar, who observes that: the process of globalization is bound to exercise a significant influence on the push-factors underlying international migration. It would decrease emigration pressures if it leads to a convergence of levels of income between the industrialized countries and the developing countries. But it would increase emigration

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<sup>71</sup> April Gordon, 'The New Diaspora-African Immigration to the United States' *Journal of Third World Studies*, Vol. XV, No.1, 1998, Spring, USA pp. 80-81



pressures if it leads to a divergence in levels of income between the industrialized countries and the developing countries. Similarly, it would decrease emigration pressures if it leads to a reduction in poverty, an expansion of employment opportunities and an improvement in the quality of life for the people in developing countries. But it would increase emigration pressures if it leads to rising poverty, growing inequality, worsening employment prospects and deterioration in the quality of life of people in development countries.<sup>72</sup>

In summary it should be realized that the globalization of economies, lack of development and political stability in Third World countries, and immigration policies that reflect the need for labour in the receiving industrialized countries have thus far been proposed as the major factors explaining international migration from the Third World to the developed countries like the USA, UK., etc. But these alone do not adequately explain why certain countries or individuals, not others, dominate migration flows nor do they explain the particular destination choice of migrants.

In addition, SAPs designed to combat Africa's economic problems have created, at least in the short run, conditions that actually increase the pressure on the educated and skilled to emigrate. By forcing governments to lay off public sector workers, open their economies to foreign competition, and lower wages, SAPs have compounded the plight of Africa's middle classes, whose living standards have declined drastically.<sup>73</sup> Internal as well as external economic policies influence the loss of professionals in Kenya. President Daniel Arap Moi followed in the policy footsteps of Kenyatta, beginning with a consolidation of free universal primary education. Under President Moi, educational opportunities at all levels increased dramatically, but could not match the needs of the

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<sup>72</sup> Deepark Nayyar, *UNU/WIDER Working Papers No. 194*, August 2000, p.16

<sup>73</sup> *Ibid.*, p. 81

country's fast-growing population. The cutthroat competition for the few places at Kenya's six public and seven private universities left many young Kenyans in the 1980s and 1990s with no option but to pursue educational opportunities abroad.<sup>74</sup>

Apart from the shortage of educational and other infrastructure to handle the demands of the growing population, another distinctive factor behind outward migration from Kenya since the mid-1980s has been the stagnation of the economy. Vital sectors such as tourism took a serious beating due to government mismanagement. Others, such as textiles and manufacturing, collapsed completely, unsupported by inefficient government policies and bogged down by widespread corruption, tribalism, and nepotism. The Kenyan story of these two decades quickly became one of unemployment and underemployment.

Factor price inequality, demand supply imbalance in manpower and unequal development pattern among other, are responsible for brain drain from LDCS, labour market imbalance is perhaps a decisive determinant. There is a constant stock of educated unemployment and there also exists, from macro perspective, another category or surplus labour arising out of underemployment. Underemployed people can be regarded as "surplus", firstly as allocation of labour from the LDCS to DCs, will increase productivity which is comparatively high in the latter countries and in this allocative sense, labour is surplus in LDCS, and secondly when wage is increased in LDCS, more labour would be redundant.<sup>75</sup>

With no plan for sustainable economic growth in hand, the government quickly became unable to recruit or retain enough teachers, police officers, or doctors. Morale among the underpaid (and often times unpaid) civil servants and other professionals

<sup>74</sup> M. Chege, (1994) 'Return of multiparty politics' in Barkan, J. D., *Beyond capitalism vs socialism in Kenya and Tanzania* (Nairobi: East African Educational Publishers, 1994) pp. 17-41:19

<sup>75</sup> Adams Walter, *The Brain Drain* (New York: The Macmillan Company, 1968) p. 29

employed by the government fell drastically. Qualified graduates of the universities and secondary schools found themselves idle and frustrated, or took up menial jobs in small-scale trading and other informal sector activities. High taxes to maintain the overblown public sector suffocated the already feeble private sector. A majority of Kenyans saw their standard of living deteriorate steadily beginning in the mid-1980s through the 1990s as painful structural adjustment programs and other donor-mandated economic austerity measures were implemented half-heartedly. Public spending on health and education at all levels suffered the severest budget cuts, and many civil servants were laid off without their termination benefits being delivered as promised.

Political turmoil is linked to the failure of economic development. As pressures of poverty, rapid population growth, disease and illiteracy and environmental degradation mount, they produce a volatile cocktail of insecurity. Resulting war, civil strife, state – sponsored terrorism, riots and other forms of political violence can lead to the displacement of large numbers of people as migrants, refugees, or asylums. In the late twentieth century, compared to previous centuries, more wars are taking place, and they are lasting longer and causing more devastation. According to Papademetriou both internal and regional conflicts, often based on religion and ethnicity, are precipitating unprecedented high levels of international migration.<sup>76</sup> Although Kenya has been relatively stable politically, it has had its days in the wind. After an unsuccessful military coup in 1982, President Moi ruthlessly consolidated his power. For more than 10 years, there was a strongly coordinated elimination of crucial political freedoms and a transfer of power from all branches of government to the executive branch. The constitution was amended under Moi's rule, turning Kenya into a *de jure* single-party state, and paving the

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<sup>76</sup> Obia C.G., 'Brain Drain and African Development: A Descriptive Framework for Deriving Indirect Benefits' *Journal of Third World Studies*, vol. X No. 2, Fall 1993, USA, pp. 75-76

way for the political, economic, and judicial persecution of many perceived enemies of the state. Many intellectuals not closely tied to the then ruling party KANU and Moi's ethnic Kalenjin community were forced into exile to such places as Norway, Sweden, Britain, Canada, and the United States.

Finally, there is a general argument that brain drain is a part or a symptom of a larger disease - lure of the west (or/and the North) and not unrelated stranglehold of the bureaucratic culture in the LDCS. The entire notion is a consequence of the "Myth of superiority of the West". Even though many nations are politically free, the power of myth is nowhere near decline. It plagues all sections of society from film stars who run to the West for a holiday, to the academics who salivate at the prospect of a 'foreign' jaunt. The obsession with foreign gadgetry is simply pathological, and it is common to see even a local engineer complacently proclaim the superiority of Western product, caring little that the latter's inferiority is in part at least a reflection on his professional competence.<sup>77</sup> The educational system in Kenya does nothing to fight the tendency; rather it strengthens it with its largely alien content and the primacy that it accords to foreign language. Sometimes, it would be only a slight exaggeration to say that the entire educational process is a preparation for a career in the West.

### **2.3 Initiatives to Transform Brain Drain into Brain Gain**

The discussions above confirm the reality of brain drain in Kenya and other African states. It is therefore important to look for means through which this can be addressed to avoid adverse economic effects. This section fills this gap by examining the initiatives of transforming brain drain into brain gain.

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<sup>77</sup> Adepoju A., *South-North Migration: The African Situation* (Geneva: IOM, 1990) p. 28

Other than Africa spending more on debt servicing each year than on health and education, it has also experienced severe effects as a result of the human capital flight to developed countries. If brain-drain begins to seriously affect the quality and delivery of public and private services as previously suggested, the need for curbing it becomes imperative and the main solution is to devise strategies of 'brain gain'. There are many strategies that a country can explore in order to mitigate this problem. Kenya has used a number of them.

One of the strategies that could be used to mitigate brain drain is delaying emigration. Normally, delay strategies involve some element of public service. For example, doctors may be asked to stay on for two years after their training to 'pay back' what they 'owe' to society. A more sophisticated strategy is to incorporate delay within the training period, thus ensuring that certification follows rather than precedes a spell of public service.<sup>78</sup> This is the strategy used by law whereby one has to pass through law school and practice for a while for them to graduate.

Emigration can be inhibited either in the destination or source countries. The main constraints in the destination countries are the labour market and immigration policies, but at high skill levels another important consideration is the portability of qualifications. Increasingly, this inhibition is falling away as educational franchise operations and international certification expand. Emigration can be inhibited in the source countries by developing special privileges for scarce groups through pay incentives, enhanced research budgets and laboratory and hospital subsidies.<sup>79</sup>

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<sup>78</sup> Chopra S. K., *Brain Drain: Causes, Consequences and Solutions* 1986 (New Delhi: Lancer International, 1986) p. 60

<sup>79</sup> Wescott Clay and Jennifer Brinkerhoff, *Converting Migration Drains into Gains: Harnessing the Resources of Overseas Professionals* (Manila: Asian Development Bank, 2006) p. 4

As noted earlier, poor payment in Kenya is the major cause of mass exodus to the western countries where experts look for greener pastures. As a means of curbing the brain drain represented by the flow of health professionals from the developing to the developed countries, some experts recommend improving remuneration and working conditions in their countries of origin. Kenya tried this strategy and recorded good results. With an increase in salary, doctors in public hospitals in Kenya increased from 600 to 1200.<sup>80</sup>

However, other scholars maintain that this supposed solution is "paradoxical." When you take the most important resources from a poor country, you destabilize the poor country and make it very difficult to improve conditions, because to improve conditions you also require the brains which have left that country. That makes it difficult to improve the reasons or the causes of migration, and it becomes a vicious circle.

In the same vein, a potential solution would be for the developed countries that benefit from the migration of African professionals to compensate the developing countries with the funds and resources that were used to educate them. Or better still professionals who have been recruited from developed countries could remit money back to their country of origin as a form of tax that could be used to finance development programmes. When one is educated by taxpayers' money and then disappears from his country, he no longer pays tax, and therefore he no longer contributes to the welfare of the rest of the society. On the contrary, Lowell opposes this strategy, because it would entail double taxation.<sup>81</sup>

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<sup>80</sup> Siringi Samuel, 'Kenya Government Promises to Increase Doctor's Salaries to Curb Brain Drain' *The Lancet*, Vol 358, No. 9278, 2001 p. 307

<sup>81</sup> Lowell Lindsay and Allan Findlay, *Migration of Highly Skilled Persons from Developing Countries: Impact and Policy Responses* (UK: International Labor Office, 2002) p. 127

On the other hand, an arrangement could be made where developed countries put requests to African countries to train the staff they need because however much developing countries try to raise the salaries of their professionals; they may not match the developed nations.

Another strategy is the adoption of international agreements by industrial and developing nations under which wealthy countries pledge not to recruit skilled people from developing states.<sup>82</sup> However, this may not hold since states prioritize their national interest over the welfare of other states. Other than states refusing to involve themselves in such agreements, their binding nature may also be fluid for those who agree to ratify them.

The two most popular strategies involve transferring skills through networks of professionals and intellectuals and the time-tested approach of repatriation. Because many people are reluctant to return to politically or economically unstable countries, some countries are now trying to find other ways to tap the knowledge and skills of their professionals based overseas. This approach is popular because it does not require participants to relocate to their home countries. An example of this is the South African Network of Skills Abroad (SANSA). Through its website, it invites professional South Africans to sign up. It reports that at least 22,000 graduates from five major South African universities resident abroad remain in touch with the universities. SANSA estimates that about 60 per cent of the country's expatriate graduates are located in six countries, with Australia, the UK and the US accounting for more than half of them. Looking at the nature of their skills, the group estimates that about 30 per cent of the University of Cape Town's contactable doctoral graduates are living overseas. They

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<sup>82</sup> Wescott Clay and Jennifer Brinkerhoff, *Converting Migration Drains into Gains: Harnessing the Resources of Overseas Professionals* op. cit., p. 5

comprise significant proportions of the university's graduates in medicine, commerce, education and engineering, all areas in which South Africa has an acute shortage of skills.<sup>83</sup>

## **2.4 Conclusion**

Developed countries continue to deprive Kenya of millions of dollars worth of investments embodied in her human resources for health. If the current trend of poaching of scarce human resources for health (and other professionals) from Kenya is not curtailed, the chances of achieving the Millennium Development Goals would remain bleak. Such continued plunder of investments embodied in human resources contributes to further underdevelopment of Kenya and to keeping a majority of her people in the vicious circle of ill-health and poverty. Therefore, both developed and developing countries need to urgently develop and implement strategies for addressing this human resource crisis.

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<sup>83</sup> Evans E. W., 'Reversing Africa's brain drain' New initiatives tap skills of African expatriates' *Africa Recovery*, vol. 17 No. 2, July 2003 p. 1



## CHAPTER THREE: KENYA'S ECONOMIC DEVELOPMENT AND BRAIN

### DRAIN/GAIN

#### Introduction

Africa is endowed with plenty of natural resources, a pleasant climate, cultural diversity, and a rich historical past, yet it remains marginalized in the economic development process and global political scene.<sup>84</sup> Recent positive changes in Africa have brought hope for an African renaissance, evidenced by impressive real growth rates in some countries. Examples of recent positive developments include the end of the civil war and a turn-around in economic development in Mozambique, the promise of a democratically elected government in Nigeria after a long period of military rule, and growing regional cooperation and integration of African economies. On the other hand, there are still major issues threatening this African renaissance. Internal and border conflicts in several countries and regions, heavy debt burdens, and low levels of private investment are still issues of major concern.

The post-colonial period in Africa saw nationalist aspirations for development entangled with the quest for industrialization. However, the national experiences of industrial and economic development in this era have been marked by varying degrees of disappointment. Kenya, like much of Africa, has failed to engender the levels of industrial growth and subsequent levels of development to which it aspired.<sup>85</sup>

This chapter assesses economic development in Kenya in a historical manner in order to find links with human capital flight. It maps economic development in two eras,

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<sup>84</sup> Emanuel Okwuosa, *New Direction For Economic Development in Africa* (London: Africa Books, 1976) p. 22

<sup>85</sup> Martin Meredith, *The Fate of Africa; From the Hopes of Freedom to the Heart of Despair: A History of 50 Years of Independence* (New York: Public Affairs, 2005) p. 71

the colonial era and the post-independence period. Besides, it examines the causes of Kenya's development/ underdevelopment orientation.

### **3.1 Economic development in Kenya**

Given that Kenya's growth performance has substantially varied over time, the subsequent section delineates the various episodes of economic performance into the colonial and post-independence époques. It draws a general trajectory of economic development of Kenya since the colonial times. It will be supported with data over time on Kenya's economic growth rate. This is imperative following the extent of brain drain in Kenya because it will form the basis of analysis in the following chapter where the impact of brain drain on economic development in Kenya will be carried out.

#### **3.1.1 Colonial Period**

Historically, Kenya enjoyed relative peace compared with other African nations. Arab and Persian settlements began sprouting along the Kenyan coast in the 10th century for trade and were violently followed up by the Portuguese in the 16th century. By the late 1800's Britain took the colonial lead, settling into the region and establishing railways into the interior under weak resistance from the natives tribes. In 1895, the British government established the East African Protectorate and subsequently opened the fertile highlands to white settlers. The settlers were allowed a voice in government even before Kenya was officially made a colony in 1920, though Africans were denied any form of political participation until 1944.<sup>86</sup> The so-called Mau Mau rebellion erupted against British colonial rule between 1952-1959, and African participation in the political

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<sup>86</sup> Bruce Berman, *Control and Crisis in Colonial Kenya: The Dialectic of Domination* (London: James Currey, 1990) p. 38

process increased rapidly. British rule lasted until 1963 and included the deaths of tens of thousands of Kenyans who resisted white settlement.

The subsistence economies of the indigenous tribal communities of Kenya were concerned with the constant pressing problems of survival, rather than with the prospects for growth. Tribes followed varied patterns of agriculture, but apparently both cultivators and pastoralists lived close to starvation and under the threat of attack and disease. Famines were frequent, and contributed to what observers at the turn of the century believed to be a decline of the African population.<sup>87</sup> In traditional society, customary practices of land tenure, rights of usage and inheritance laws led to fragmented, scattered holdings. The men-folk fulfilled the functions of protection and hospitality, while most of the cultivation of land was done by women using simple techniques. Under these conditions the yields of production were uncertain and the capacity for improvements and diversification limited. The horizons of consumer wants were correspondingly narrow, and could generally be satisfied through the network of mutual kinship obligations. This provides a basis for analysis of brain drain in Kenya today, as is illustrated in the subsequent chapter.

After British administration was set up, and immigrant communities arrived in Kenya, this static, indigenous economy began to be transformed. New wants were evoked, new capacities developed as a cash economy was introduced and the first steps toward economic development taken. The use of money and the exchange of goods were extended among the indigenous population by the Government's levying of taxes, by the trader's display of new products, and by the expanded market for surplus production of food crops provided by the improved communications system. The establishment of law

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<sup>87</sup> J. E. Goldthorpe, 'The African Population of East Africa: A Summary of its Past and Present Trends' Appendix VII, Report of the East Africa Royal Commission 1953-55, pp. 462-473

and order curtailed tribal warfare, and the development of medical services limited endemic diseases (smallpox, sleeping sickness and malaria) so that the population grew, and more men were available for peaceful tasks. Meanwhile, European and Asian enterprise developed rapidly though not all were successful-and to some extent independently of the slower process of modernization of the African sector. A new range of crops for export-tea, coffee, sisal-was produced, and trading and service industries expanded primarily in response to the demands of the immigrant peoples.<sup>88</sup>

These activities, however, provided a further indirect stimulus to the indigenous economy. The plantations and farms of the settlers offered employment for African labor, supplementing subsistence incomes. African farmers were introduced to cash crops, to improved methods of farming, and provided with a greater range of implements. The growth of the economy before World War II was still hesitant and experimental. There were many failures among settlers as they established a modern farming industry in Kenyan conditions.<sup>89</sup> Indigenous farmers did not always respond to opportunities for growing for the market, nor to efforts to change customary systems of land tenure and land usage. As noted above, a second argument about brain drain in Kenya originates here and is covered in the following chapter. Economic development in the 70s was higher than it is now and brain drain was lower as illustrated in the previous chapter.

The economy of Kenya now has a dual character, in which the two patterns of production exist side by side. Most of the population still comprises of peasants devoting a considerable part of their resources to growing staple food crops for the immediate subsistence needs. But the modern monetary sector, based on specialized production of goods for cash, is estimated to contribute more than three-quarters of the value of total

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<sup>88</sup> Bruce Berman, *Control and Crisis in Colonial Kenya: The Dialectic of Domination* op. cit., p. 45

<sup>89</sup> Schatzberg Michael, *The Political Economy of Kenya* (Westport, Conn.: Praeger Publishers, 1987) p. 56

production. Indeed, the two sectors are no longer altogether distinct. African farmers are expanding their production of goods for the market rapidly. They received 6 million from the sale of their crops and livestock products in 1956, and by 1960 had expanded this income to 10 million.<sup>90</sup> Other Africans left the land and entered completely into the money economy as wage and salary earners or as entrepreneurs.

Imports of goods from outside East Africa into Kenya increased very rapidly between 1950 and 1955—from 34 million to 72 million US dollars, but after that, they fluctuated in value at a level somewhat below the peak. The composition of imports did not drastically alter over the period from 1950 to 1961, although quite sharp changes were registered from year to year. Kenya imports large quantities of producers' goods—industrial, transportation and agricultural machinery and materials and the proportion of these in total imports has changed little since 1950.<sup>91</sup> The scale of production needed to manufacture these lines has remained beyond the scope of the domestic economy. Consumer goods, private motor cars, appliances, clothing and textiles, averaged about 25 percent of the total. Since prices Kenya paid for imports increased only slightly during the 1950's, changes in their total value reflect largely the volume of goods imported. Exports grew steadily over the decade and by 1960 had doubled their value of 1950. They rose from 17 million to 35 million or at an average rate of more than 7 percent a year.<sup>92</sup> The variety of conditions for cultivation in Kenya is reflected in the considerable range of agricultural products it exports and has reduced the vulnerability of the country's export earnings to sudden changes in the market for any particular commodity. Increases in the value of exports have been spread over several commodities. This range of agricultural

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<sup>90</sup> East Africa, 'Report of the Economic and Fiscal Commission' February 1961, London pp. 45-48

<sup>91</sup> GOK, 'The Geology of Part of South East Uganda' *Memoir No. VIII of Geological Survey Dept., Kenya* (Nairobi: Government Printers, 1970) p. 94

<sup>92</sup> East Africa, 'Report of the Economic and Fiscal Commission' op. cit., pp. 45-48

exports also has compensated partly for the paucity of known mineral resources in Kenya. With the exception of a period from the later 1930's to the late 1940's, when a gold deposit in Nyanza Province was being exploited, minerals have contributed less than 10 percent of all exports. This confirms the claim made in a few paragraphs above that in the 50s, 60s and 70s, the rate of economic development in Kenya was higher.

Coffee remained Kenya's predominant commodity export, earning 10.6 million or about 30 percent to total exports in 1961.<sup>93</sup> Although Kenyan coffee sold at a premium even in depressed world markets, the statistics overstated the imports of capital goods into Kenya, as imports of these goods by the East African Services were attributed entirely to Kenya, although financed by all three countries.

Despite unfavorable price movements in the latter half of the 60's decade, the value of Kenya's exports rose because of increases in the physical volume of output for the world market, which doubled between 1954 and 1961. The export price index in 1961 was at about the same level as 1950. This price experience compares well with that of Tanganyika and Uganda, whose export prices over the period fell: for the former from 97 to 86, the latter from 82 to 64. In the changing conditions for Kenya's imports and exports, the terms of trade, the measure of the volume of exports required to finance a given volume of imports, deteriorated by 15-20 percent between 1950 and 1961.<sup>94</sup> While this movement limited the extent to which increases in production for export were transferred into rising levels of income, by virtue particularly of the composition of its trade, Kenya still fared well by comparison with other developing countries.

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<sup>93</sup> 'Economic Survey' (Nairobi : East African Statistical Department, 1965)

<sup>94</sup> Central Bureau of Statistics, Central Bank of Kenya, Ministry of Labour and Human Resource Development, 2000

### 3.1.2 Post-Independence Period

The coming of independence to Kenya placed the responsibility for the country's future squarely upon the shoulders of the people of Kenya themselves. Independence made more urgent the need for economic development, which itself provided the opportunities to attain many of the political and social objectives which were sought. Although there was certainly a great potential for development, immediate economic prospects were clouded by the uncertainty and difficulty associated with rapid political change.

The impact of the move from a unitary to a regional system of government on the economy proved difficult to assess. However, internal self-government, and subsequently independence, entailed far-reaching consequences in the field of public administration. While progress was made in recruiting public officials locally, the supply of individuals with adequate training and experience was still limited.<sup>95</sup> Kenya therefore depended heavily on the services of expatriate civil servants who constituted most of the senior administrative and professional staff available. Much of the economic development of the country during the years of transition depended on having their services or the services of others like them. Outside the public sector, non-African residents of Kenya-Asian and European had a preponderant role in building up the money economy, by supplying both the necessary skills and capital. European farms still provided about three-quarters of Kenya's exports. Kenyans in increasing numbers were acquiring advanced skills and entering the money economy and indeed a speeding-up of this process figured largely in future public policy.<sup>96</sup>

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<sup>95</sup> Oyugi W. O., *Politics and Administration in East Africa* (Nairobi: East African Educational Publishers, 1994) p. 60

<sup>96</sup> Coughlin P. and G. K. Ikiara, *Industrialization in Kenya: In Search of a Strategy* (Nairobi: Heinemann, 1988) p. 86

But Kenya remained a low-income country, and economic growth depended for some time on funds from abroad to supplement local savings much of which, in any event, was made by Asian and European residents.

Although the strategy and focus of public policy in Kenya have changed from time to time over the past four decades, the fight against unemployment and poverty has for long been its cornerstone. Since independence in 1963, Kenya has pursued various development paradigm models aimed at generating sustainable real growth in the economy.<sup>97</sup>

For instance, the Fourth Development Plan 1979/1983 was a blueprint for a new look of the Kenyan economy and society and the struggle for it continues till today. The theme was the 'alleviation of poverty'. When addressing the challenges we face, we have to take stock of our position. And as we are all painfully aware, the situation is difficult. Poverty is high and increasing. Food insecurity is afflicting an ever increasing numbers of Kenyans.

This policy thrust always assumed that the rate of economic growth would outpace population growth, thereby increasing employment and raising incomes. It was this development objective that informed the economic policies of the post-independence period, such as employment generation through agricultural settlement, government participation in business activities, the 'Kenyanization' of the public and private sectors, investment in social infrastructure, and an extensive package of industrial protections for Kenyan businesses.<sup>98</sup>

However, while the development policies of the period did result in GDP growth averaging 6.6 per cent annually during 1964 - 73, that growth was not sustained. Several

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<sup>97</sup> Gerzel C., *The Politics of Independent Kenya* (Evanston: Northwestern University Press, 1970) p. 11

<sup>98</sup> Barkan J. D., *Politics and Public Policy in Kenya and Tanzania* (New York: Praeger, 1984) p. 37



reasons account for this, including an increase in population growth rates, economic emergencies such as droughts and oil shocks, coupled with a bloated public sector and inefficient government agencies. These factors combined to aggravate an already inefficient and uncompetitive domestic economy. Inevitably, post-independence growth halted and the economy remained stagnant. Consistently high inflation, widespread unemployment was high, especially among young people, and under-employment all contributed to unprecedented high levels of poverty. A stagnant economy has been cited as one of the major reasons for brain drain since people seek greener pastures in their destination countries.

In the 1980s, the public policy response was to review these interventionist economic development strategies. This led to the adoption of the Structural Adjustment Programmes, first introduced under Sessional Paper No. 1 of 1986 entitled Economic Management for Renewed Growth. In furtherance of this market-oriented economic policy, the Government introduced an economic liberalization and reform programme in 1993, involving the removal of import licensing, price controls and exchange controls. This package of measures was intended to re-focus the economy and integrate it into the global economy.<sup>99</sup>

In general, the liberalization policies that started in 1980 had a number of weaknesses. First, for a long time the country was unable to attain the necessary speed, and the intensity of reform was wanting. The reforms were carried out rather intermittently and without full ownership or commitment. The overall protection of the manufacturing sector continued to be high. During the first two phases of liberalization, implementation moved slowly and intermittently, mainly due to little commitment on the

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<sup>99</sup> Bienen H., 'The Politics of Trade Liberalization in Africa' *Economic Development and Cultural Change*, Vol. 38 No. 4 (July, 1990) pp. 713-731: 719

part of policy makers and rampant rent seeking which was rapidly becoming one of the most serious bottlenecks in the country's economic and socio-political development.<sup>100</sup>

The support of the World Bank, the International Monetary Fund and other donors for these reforms was probably responsible for the brief turnaround in the economy during 1994-96. GDP grew at 4.8 per cent in 1995 and by 4.6 per cent in 1996. Inflation was briefly kept under control, but by 1996 it had started to rise again. Moreover, overall economic performance did not seem to respond to the reforms and so the growth rate was in steady decline throughout the last decade. Table 1 below shows clearly how the percentages grew from 1994 onwards. Investment and savings also declined, falling from 20.4 per cent of GDP in 1996 to 18.4 per cent the following year.<sup>101</sup>

In summary, Kenya inherited a relatively well established industrial sector in the region, the sector's overall performance has been rather poor for most of the post-independence period with the exception of the period between 1963 and 1972 when it registered an annual average growth rate of above 10 percent.<sup>102</sup>

The GDP growth rate has declined continuously from a peak of about 6.5% per year during the decade 1963 – 72, to less than 4% per year in the following decade, to, more recently, only about 1.5% per year during the 1990's. GDP actually fell about 1.2% in year 2000. The table below clearly sets the path of Kenya in the GDP growth since 1995.

**Table 1: GDP Percentage Growth (1995-2006)**

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<sup>100</sup> Ibid., p. 720

<sup>101</sup> Republic of Kenya, *Economic Survey* (Nairobi: Government Printer, 1998)

<sup>102</sup> World Bank, 'Economic Development of Kenya' a report of a World Bank economic survey mission, (Baltimore: Johns Hopkins Press, 1963) p. 30

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
GDP growth (%)	4.8	4.6	2.1	1.8	1.3	1.5	3.1	4.4	5.5	6.0	5.8	6.1

Source: Various Economic Surveys of the Government of Kenya

However, the lack of sustained commitment to reform, coupled with political instability, contributed significantly to the failure of the policies to stimulate economic growth.<sup>103</sup> Towards the end of the 1990s, inadequacies in the infrastructure, such as electricity and water shortages and bad road systems, contributed to the stagnation of the Kenyan economy. With these highly complex economic problems taking place concurrently with political liberalization, which has brought about multi-party democracy after more than 30 years of one-party rule, Kenya is today facing a multiplicity of socio-economic problems.

The social and economic crisis has been compounded by the HIV/AIDS pandemic that has adversely affected the labour market, particularly in terms of labour supply, labour costs and productivity. According to government statistics, the national HIV prevalence rate was estimated at 13.5 per cent in 2000. The urban prevalence rate was much higher – at 17.5 per cent – for the same year.<sup>104</sup> The menace of HIV/AIDS could erode the economic and social progress the country has achieved and undermine the ability of business to compete effectively in domestic and international markets.

One of the strategic responses to the socio-economic problems is the State's determination to involve the key stakeholders by such means as widening the long-

<sup>103</sup> Ochieng R. and Maxon, *An Economic History of Kenya* (Nairobi, East African Publishers, 1992) p. 75

<sup>104</sup> Republic of Kenya, *Economic Survey*, (Nairobi: Government Printer, 2002)

established tradition of consensus building through tripartism and other consultative mechanisms which existed before independence.

Following the Kenyatta era, the Kenyan government was most notably dominated by the iron grip of Daniel Arap Moi, who's 24-year presidential run disallowed the formation of dissenting opinions or political parties to rival his own – the ruling Kenya African National Union (KANU). In 1993, after protests and pressure from major donors, the IMF, and World Bank, Moi called open elections and was controversially elected with only one-third of the vote. The eventual retirement of Moi in 2002 signified the end of KANU's 40-year stranglehold on Kenya and began the current president, Mwai Kibaki, bid to end much of the nation's corruption, provide free primary education, and revive economic development.<sup>105</sup> Kibaki's peaceful election to the presidency in 2002 gave hope to many Kenyans for a better future, but Kibaki is currently struggling with lingering corruption, limited growth, and minimal foreign investment. It is established that an authoritative democracy or anti-democracy causes a flight of human capital especially of the elite who try to change the course of their country without success.

As of 2003, 56 percent of the Kenyan population lived below the poverty line - \$17 per month in rural areas and \$36 per month in urban areas. In 1994, 47 percent of Kenyans fell below this line. Current trends maintain that 65.9 percent of the population will live below the poverty line by 2015. According to the Human Development Index (HDI), Kenya has experienced steady declines since 1980, with only the goal of universal primary care showing positive growth. Extreme poverty – defined as those living under \$1 per day – includes over 50 percent of Kenya's current population.<sup>106</sup> These staggering rates, combined with future predictions, paint an extremely bleak picture for Kenya and its

<sup>105</sup> Jonyo, F. and Owuoché S., *Politics in Kenya: A perspective* (Nairobi: Azinger Ltd, 2004) p. 9

<sup>106</sup> Kenya National Bureau of Statistics, *Basic Report: Kenya Integrated Household Survey 2005/6* (Nairobi: Ministry of Planning and National Development, 2007) p. 46

fight against poverty. Most people believe that human welfare standards in the west are higher than those in the developing countries. Staggering rates of human development confirms this thus causing emigration.

As a result, education, gender equality, HIV/AIDS reduction, environmental stewardship, and maternal health are all lacking positive movement forward. Free primary education came into effect in 2003, raising enrollment by 1.5 million children. However, these schools are vastly under-funded, resulting in very large class size, a lack of materials and activities, and a severely restricted number of educators to handle the growth.<sup>107</sup> Child mortality rose from 9 percent in 1990 to 18 percent in 2007, while infant mortality has also grown 4.5 percent in the same time frame. Severe flooding and shifting environmental conditions, combined with a growing population, presents a major threat to Kenya's natural habitats and its unique species of plants and animals. Taking a major toll on each of these issues is the continued corruptions remaining from KANU's power reign. Millions of dollars of aid funds is not being put to efficient use, leading to the World Bank's withdrawal of funds in 2001 and the recent creation of an anti-corruption taskforce to battle the deeply-rooted issue.

Although the Kenyan economy remains predominantly agricultural, industrialization has been an integral part of the country's development strategies both in the colonial and post-colonial periods. Not only has industrialization been seen as a mechanism of diversifying the economy but also as a dynamic engine for sustained accelerated economic growth especially in the post-independence period. Kenya's Development Plan (1997-2001) emphasized the development of the industrial sector for stable and sustainable economic growth in the 21st century. Significant in this respect is

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<sup>107</sup> Somerset A., 'A Preliminary Note on Kenya Primary School Enrolment Trends Over Four Decades' Paper Presented at CREATE Conference, University of Sussex 27 June 2006

the fact that in its Sessional Paper No.2 of 1996, the country planned to achieve the status of a new industrialized country by the year 2020.<sup>108</sup>

Other than GDP, the Human Development Index (HDI) is also used to illustrate economic development of a country. The HDI is an index combining normalized measures of life expectancy, literacy, educational attainment, and GDP per capita for countries worldwide. It is claimed as a standard means of measuring human development, a concept that, according to the United Nations Development Program (UNDP) refers to the process of widening the options of persons, giving them greater opportunities for education, health care, income, employment, etc. The basic use of HDI is however to rank countries by level of "human development" which usually also implies to determine whether a country is a developed, developing, or underdeveloped country.<sup>109</sup> This measure can also be used to track the economic development of a country. The table below depicts Kenya's HDI since 1975. It illustrates that there is a general improvement in Kenya's human development though there are setbacks once in a while.

**Table 2: Kenya's HDI (1975-2005)**

Year	Human Development Index
1975	0.466
1980	0.514
1985	0.534
1990	0.556
1995	0.544
2000	0.529
2005	0.521
2007	0.537

Source: Different Kenya Annual Human Development Reports

### 3.2 Role of Skilled Manpower

<sup>108</sup> Republic of Kenya, Sessional Paper No.2 of 1996 (Nairobi: Government Printer, 1996)

<sup>109</sup> Rao VVB, 'Human Development Report 1990: Review and Assessment' *World Development*, Vol 19 No. 10, 1991 pp. 1451-1460

Although there are stylized facts that represent growth experiences of countries in general, growth remains a complex issue and growth regressions are as good as the data that goes into them. Growth is a summary of almost everything that goes on in a society and that being the case, it is never easy to pinpoint a couple of factors as key because these vary from country to country. The case for Kenya analyzed in this section is an attempt towards identifying some of these factors.

The conventional neoclassical model is often praised for its simplicity and flexibility in identifying the core determinants of long term growth. On the other hand, advocates of endogenous growth models praise them for incorporating policy and institutional factors and for endogenising technological progress. However, there is growing concern that endogenous models have only helped to strengthen the predictive power of the neoclassical model: 'One of the lasting contributions of endogenous growth theory is that it stimulated empirical work that demonstrated the explanatory power of the neoclassical model'.<sup>110</sup> In particular, investment (or the capital stock) is a core variable.

Endogenous growth theories assign an important role to investment both in the short and long term; Hall and Jones identify investment as a key determinant. High investment ratios do not necessarily lead to rapid economic growth; the quality of investment, its productivity, existence of appropriate policy, political, and social infrastructure are all determinants of the effectiveness of investment.<sup>111</sup> Private investment is often seen as the engine that drives a country's economy, while public investment provides the necessary infrastructure. The two are related, as public investment may crowd in (if it provides the infrastructure to support the private sector) or

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<sup>110</sup> Barro R. J., 'Determinants of Economic Growth: A Cross-Country Empirical Study' Cambridge, MA: *NBER Working Paper Series* 1996, p. 2

<sup>111</sup> Hall R.E. and Jones C.I., 'Why Do Some Countries Produce So Much Output per Worker than others?' *Quarterly Journal of Economics*, Vol. 114 Issue No. 1, 1999 pp. 83-116

crowd out (by increasing costs of borrowing or 'cherry-picking' the best investment opportunities) private investment. Public investment itself affects growth either directly, via its productivity, or indirectly via its effect on private investment. Public investment in human capital (health and education), law and order, research and development, and social and economic infrastructure leads to creation of positive externalities which in turn improve the productivity of private investment. Thus, one would expect a positive relationship between public investment and economic growth.<sup>112</sup> The retention of skilled manpower is a huge force against brain drain. In some cases, students study overseas but they return to their countries to offer their skills to their people.

Foreign trade is another variable that influences private investment and ultimately economic growth. According to neoclassical thinking, openness to trade has many advantages such as efficiency gains that come with specialization and competition from international trade; embodied technological transfer through imported inputs; scale economies arising from expanded markets, and diffusion of ideas through global interaction.<sup>113</sup> On the other hand, competition arising from openness to trade may discourage innovation by making investment in research and development less profitable;<sup>114</sup> underdeveloped domestic industries are exposed to competition from imports while exports are often exposed to very volatile world markets. Although the literature on trade and growth tends to focus on exports, there are two justifications for concentrating on imports – they represent imported technology, capital, and intermediate goods and to some extent are used directly for investment.

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<sup>112</sup> Artadi E.V and Sala-i-Martin X., 'The Economic Tragedy of the 20<sup>th</sup> Century: Growth in Africa' Cambridge, MA: *NBER Working Paper Series WP9865*, 2003

<sup>113</sup> Zhang X. and Zou H., *Foreign Technology, Imports and Economic Growth in Developing Countries* (Washington, DC: The World Bank, 1995) p. 85

<sup>114</sup> Harrison Ann, 'Openness and Growth: A Time-Series, Cross-Country Analysis for Developing Countries', *Journal of Development Economics*, Vol. 48, 1996 pp. 419-447



Other important determinants of growth (positively or negatively) include human capital, technological advancement, government consumption expenditure, taxes, population growth, inflation, measures of rule of law, governance and democracy. Kenya's population has tripled over the past 30 years, leading to increasing pressure on natural resources, a widening income gap and rising poverty levels that erode gains in education, health, food security, employment and incomes.

Much of the explanations for Africa's disappointing record of economic development have focused on two central factors: the structural constraints on industrial development and the policies that were pursued.<sup>115</sup> In many ways, these factors are inherently linked to a colonial legacy. Africa's disappointing record of industrial and economic development cannot be divorced from its historical context. It is thus necessary to consider the extent to which the structures that were in place at the end of colonialism predetermined the pattern of development that would emerge in the post-independence era. When evaluating the post-independence experience of industrial development, two specific colonial legacies stand out as decisive: 'colonial under-development' and the 'policy inheritance'.<sup>116</sup> This article argues that although these legacies were profound, it was ultimately the dynamics of post-independence realities that determined the path of development. This locks out the value that can be added by skills development of the citizenry in order to improve the development of the society.

The approach of independence added a new urgency to some of the salient problems confronting future economic development in Kenya. Although the long-run capacity for growth of the economy was enhanced by this sense of urgency and by a heightened determination of a self-governing people, the short-run outlook was clouded

<sup>115</sup> Bienen H., 'The Politics of Trade Liberalization in Africa' op. cit., p. 42

<sup>116</sup> Leys Colin, *Underdevelopment in Kenya: The Political Economy of Neo-colonialism* (London: Heinemann, 1975) p. 53

by uncertainties associated with rapid change. There were in the first place a number of general physical limitations to achieving substantial rates of growth in output in Kenya. Perhaps the most crucial of these were the impediments to raising the productivity of agriculture. Increased output of primary products in Kenya would have provided the basis for an expansion of the economy as a whole.

The prospects for increasing agricultural production depended in part on the availability of land. Only a small part of Kenya comprised agriculturally useful land. Two-thirds of the country, receiving 20 inches or less rainfall a year, was uncultivated and of very limited capacity for grazing. Although there was no overall scarcity of land in relation to population at the time, the restriction of land to individual tribes led to the underutilization of land in some areas of high-potential farming.<sup>117</sup>

Most Kenyans live in the countryside and depend on the land for their livelihood. But there is little good farmland left for Kenya's growing population. Four-fifths of the land is arid or semi-arid and can be used only for herding. And heavy grazing is turning even this land into a desert. Forests in the highlands and mountains have long provided lumber for building and fuel for cooking and heating. But heavy cutting is reducing forest reserves and causing soil erosion.<sup>118</sup> Agriculture still provides a living to seven Kenyans in ten, but the pressure of population on the land is increasing. That is why many rural people are moving to Nairobi and other cities and towns, where they settle in slums and search for jobs.

Problems also existed in the use of available land, deriving from customary systems of landholding and traditional methods of cultivation. The fragmentation of farm units, and the preponderance of communal over individual rights to the ownership of land

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<sup>117</sup> Bruce Johnston and John Mellor, 'The Role of Agriculture in Economic Development' *American Economic Review* Vol. 4 Issue 4 September 1961, pp. 566-593: 572

<sup>118</sup> *Ibid.*, p. 572

were difficulties to improved agriculture in Kenya and substantial progress toward consolidation and the establishment of individual title to land has been made in some areas.

Experience showed, nevertheless, that the techniques for overcoming resistance to changes in patterns of landholding cannot be easily transferred from one region to another, and unless there is economic pressure on the farmer, government programs may prove costly and ineffective. Subsistence cultivation also lessens the incentives of farmers to raise their productivity by adopting new methods, or by switching to alternative crops. Peasant cultivators who shift to growing for the cash market encounter new risks: they must face the uncertainties of variable prices as well as the old uncertainties of the yield of their crops.<sup>119</sup>

The spread of education is an essential feature of the introduction of a modern economy. As economic activity increases in complexity, it makes continuous demands on the range and level of human skills. The educational system must, therefore, be appropriate to meet these demands. It is difficult to measure the returns to be gained from investing in education. Clearly, there are heavy costs associated with a failure to provide the trained manpower needed to extend the use of technological improvements and so raise productivity. The most immediate benefits to the economy are likely to be gained by assuring the supply of directly productive skills, particularly in agricultural extension, which in turn depend upon an expansion of secondary education.<sup>120</sup>

As a corollary to the appropriateness of the country's educational system for meeting the manpower requirements of development, there is the danger of creating a large group of young people dissatisfied with traditional society and its standards, but not

<sup>119</sup> George Monbiot, *No Man's Land: An Investigative Journey Through Kenya and Tanzania* (London: Macmillan, 1994) p. 53

<sup>120</sup> Tooley James and Dixon Pauline, *Is Education Good for the Poor?* (USA: Cato Institute, 2005) p. 19

equipped with adequate training for the jobs to which they aspire. It seems clear that such a discontinuity between skills and aspirations has made a major contribution to the existence of a serious level of unemployment in Kenya.<sup>121</sup> The population is believed to be growing at a substantial rate, and the traditional sector possesses only limited capacity for supporting wage employment. Secondary industries have not developed to the point where a steadily expanding work force has been established. About 28 percent of the able-bodied males in Kenya were in paid employment in 1960, most of them in non-African owned agricultural enterprises, and this proportion had not increased significantly during the 1950's.<sup>122</sup>

Under these conditions, an unfortunate combination of high labor costs together with a considerable pool of unemployed labor may exist. People are not trained for the kinds of jobs for which there is demand. The problem of unemployment has been aggravated recently by the slowing down of economic activity: between 1960 and 1961, the numbers employed fell more than 5 percent. Unemployment is concentrated partly in urban areas, where overcrowding, lack of adequate sanitation, instability of the work force, and the moral dilemmas of a new environment place an added burden on social services that the country can ill afford.

The availability of an adequate supply of human skills in Kenya will depend at least for a number of years not only on education, but also on the presence of non-Africans, both in the civil service and in private activity. Most of the technical and professional services such as accounting and engineering are now provided almost exclusively by them. They are the main source of experience for the management of organized industry and the government services. For the expansion of education, reliance

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<sup>121</sup> Ibid., p.28

<sup>122</sup> Robert Pollin Mwangi Wa Githinji and James Heintz, *An Employment-Targeted Economic Program For Kenya* (Northampton: Edward Elgar Press, 2008) p. 106

must be placed primarily on non-Africans for some years to come. Africans have demonstrated their capacity in both private and public affairs, but the demands of an expanding economy for technical, administrative and managerial skills will outrun the speed at which talents can be developed and experience accumulated. Under such conditions, expatriate manpower now in Kenya represents a valuable asset, but one in danger of being lost. If these skilled people should leave Kenya in large numbers during the next few years, it would be difficult, if not impossible, to maintain many of the economic activities on which the present level of output rests. Even if replacements from abroad could be found to man the essential services needed to avoid drastic dislocation of the economy, to do so would almost certainly inflate the costs of the services and lose the benefit of an extensive knowledge of local conditions.<sup>123</sup> The requirements for retaining the supply of human resources in the non-African communities are, however, not so much economic as political and social. The ability of the Government to plan and the country to achieve economic development at the same time as political independence depends upon a continued supply of qualified personnel no matter what their origin.

The localization of the civil service in Kenya poses a difficult question of determining the appropriate level of salaries for government personnel in the future. Expatriates have received an added "inducement" allowance-paid by the host governments-to encourage them to serve overseas rather than accept other jobs at home. But even the basic salary scales for civil servants are out of proportion to incomes received in other occupations in Kenya. The size of the civil service is related to past rather than current and future conditions, and the mission believes it should be reviewed.

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<sup>123</sup> Lall S., *The Technological Response to Import Liberalization in Sub-Saharan Africa* (London: Macmillan Press, 1999) p. 64

We also consider that the grading of posts should be adjusted to reflect the employment of less experienced officers as a consequence of localization.<sup>124</sup>

The supply of capital is another of the major determinants of growth. In the past, Kenya has apparently been able to finance an appreciable part of its capital formation, particularly in the private sector, from domestic East African sources. Local financial institutions, the commercial banks and insurance companies, grew into important sources of investible funds. As a result of the crisis of confidence, private capital has become increasingly scarce and is unlikely to be available again until conditions in East Africa warrant a favorable reappraisal of the risks of investing there, and may already have found and been developing more attractive prospects elsewhere.<sup>125</sup> Increases in the number of savings deposits by Africans indicate that many of them have a surplus of disposable income over their consumption needs, but these deposits have not so far provided a substantial source of funds for investment purposes. At present, the prospects for financing capital formation out of domestic private savings are extremely limited. Nor does the public sector offer a more promising picture. Since the early years of the Emergency, Kenya's government finances have relied on some external assistance to cover even current expenditures.

### 3.3 Conclusion

The economic performance during much of the Kenyatta regime was, generally, impressive. During the first decade of Kenyatta's regime (1963–73) virtually every indicator of performance was well above average. The manufacturing sector, which had already been identified as an important sector, recorded an average annual growth rate of

<sup>124</sup> Robert Pollin Mwangi Wa Githinji and James Heintz, *An Employment-Targeted Economic Program For Kenya* op. cit., p. 107

<sup>125</sup> Easterly William, *Can Foreign Aid Save Africa?* (New York: New York University, 2005) p. 1

about 7 percent over this period. This success can be attributed to a number of factors including sound management of the economy that characterized most of the Kenyatta regime. During this first decade, the government and the Central Bank generally followed a cautious financial policy which ensured low inflation and manageable levels of external debt. There were deliberate efforts to keep budget deficits within manageable levels and to reduce the country's dependence on aid. However, from the second half of the 1970s, the country's economic performance started to decline, partly due to the commodity and oil shock of the 1970s.

Skilled migration contributes significantly towards economic efficiency at the destination. This process affords receiving countries opportunities to employ the best skills, subject to demand and supply factors. But given the costs on national investment on persons that have acquired internationally marketable skills and the demand for such skills in the home country, skilled migration could constitute brain drain to the countries of origin.

Moi's regime has been generally characterized by poor performance of the economy in the 1980s and the 1990s. While a number of external factors like commodity and oil shocks and the unfavourable international environment are partly responsible for the performance, a number of domestic factors such as mismanagement, corruption, poor infrastructure and insecurity have been more important.

Economic growth is not automatic and, if the living standards of the people are to be raised, Kenya must adopt a program for development in the public sector to give emphasis to activities with the highest potential returns, and measures to stimulate and encourage expansion of production in the private sector. But such measures will come to nought unless steps are first taken to restore confidence, to remove as soon as possible the

present uncertainties as to political and social conditions, and so arrest the declining trend in investment.

In developing suitable programs and policies for economic development, it should be recognized that both migration and terminal brain drain has been cited among the critical factors that affect economic growth in Kenya. Therefore, efforts should be directed toward addressing these issues among the other factors.

Through the 1970s all but 1 of the 30 would-be newly industrialized countries had registered average growth. However, they decided to invest heavily in human capital. It is unrealistic to assume that within a generation the entire nation will be college-educated scholars but basic primary education helps the economic development cause. This investment in primary education may be costly initially, but it will eventually pay dividends as a basic level of education will help production immensely. Just the ability to read instructions, manuals, or announcements from the government will set the stage for an even greater educated workforce in the future and for innovative thinking. An educated workforce is more likely to innovate and to raise the standard of the nation as the basic factor endowments increase. In the NICs, the government directed its limited public funding of post-secondary education "on technical skills, and some HPAEs imported educational services on a large scale, particularly in vocational and technologically sophisticated disciplines. The result of these policies has been a broad, technologically inclined human capital base well-suited to rapid economic growth.<sup>126</sup>

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<sup>126</sup> MacNeill, J., *Beyond Interdependence* (Oxford: Oxford University Press, 1991) p. 15



## CHAPTER FOUR: A CRITICAL ANALYSIS OF THE IMPLICATIONS OF BRAIN DRAIN ON ECONOMIC DEVELOPMENT IN KENYA

### Introduction

International migration of talented people is as old as the early history of mankind. Such movements had always been justified by economic, social and political exigencies depending on the situation and people involved. These very reasons still explain such international movements among talented people today. While such movements did not attract a lot of attention in the past, it became a problem especially from the 1960's when the trend became lopsided with Western Europe and North America being besieged by talented people from the less developed countries (LDCs). According to Todaro the international brain drain, as the movement later became known, deserves mention because of its effects on the rate and structure of LDC economic development.<sup>127</sup>

This chapter critically analyzes the implications of brain drain on economic development in Kenya. This is done by cross examining the data collected in the previous chapters on the extent of brain drain in the country and on the trajectory of economic development in Kenya. Based on present evidence that Kenya has experienced significant brain drain, the hypothesis that the consequence of an increase in brain drain is a slower economic growth rate for any country is tested.

### 4.1 Implications of Brain Drain on Economic Development in Kenya

Over the last three decades, Kenya and many other countries in Sub-Saharan Africa (SSA) have experienced rapid emigration to the developed world. The general

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<sup>127</sup> Todaro M.P., *Economic Development in the Third World* (London : Longman, 1985) p. 353

view is that emigration from developing countries has led to brain drain and brain waste. One central question that has caused a lot of controversy has been whether brain drain has positive or negative impact on developing countries. One divergent school of thought examines brain drain from the perspective of the highly detrimental effects arising from the loss of the brightest minds from developing countries, thus weakening capacity for development. On the other hand, representatives of the convergence school of thought argue that the problem of brain drain is over dramatized and is less critical than it is usually portrayed. They tend to emphasize the beneficial consequences of migration for both the receiving country and the sending country.<sup>128</sup>

The minor role of the Southern Hemisphere and its limited influence on markets could have concealed the problem confronting developing countries for a long time. But the skills exodus is not a localized phenomenon. It affects all countries in one way or another. It is no longer an exclusively North/South phenomenon, as it now affects North/North and South/South relations.<sup>129</sup> This makes it imperative to examine implications of brain drain in order to forge remedies for an otherwise global danger.

International mobility of skilled workers can generate global benefits by improving knowledge flows and satisfying the demand for skills. The risk of a brain drain damaging rich countries is arguably lower, but it does exist.<sup>130</sup> In sending countries in the developing world, the challenge is greater.

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<sup>128</sup> Mato Narciso, *Brain Drain In Africa* (Ghana: Association of African Universities, 1999) p. 120

<sup>129</sup> Bond P., *Looting Africa: The Economics of Exploitation* (London: Zed Books, 2006) p. 62

<sup>130</sup> Heenan David, *Flight Capital: The Alarming Exodus of America's Best and Brightest* (New York: Davis-Black Publishing, 2005) p. 91

#### *4.1.1 Loss of Human Capital*

Some authors hold that brain drain represents a major development constraint as it drains sending areas of their human capital. This affects economic growth through three different ways.

First, Kenya has suffered a net loss because it funds the education and training of professionals who, precisely at the moment they start producing, decide to emigrate. Therefore, it loses critical human capital in which it has invested resources through education and specialized training and for which it is not compensated by the recipient country. It is in this view that brain drain is often referred to as “an international transfer of resources in the form of human capital that is not recorded in any official balance of payments statistics.”<sup>131</sup> Avveduto and Brandi corroborate with the above sentiments by echoing that “the country that invests in human resources is not the one that enjoys the return on its investment”.<sup>132</sup> Conversely, the receiving country obtains qualified workers without having to bear the costs of training them, and therefore makes a net gain. Kenya’s education budget becomes nothing but a supplement to the education budgets for the West hence giving developmental assistance to the wealthier western nations, which makes the rich nations richer and Kenya poorer. This argument was also supported by UNCTAD when it estimated that one highly trained African migrant between 25 – 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.<sup>133</sup>

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<sup>131</sup> Smith M. & A. Favell, *The Human Face of Global Mobility* (New Brunswick, NJ: Transaction Publishers, 2006) p. 25

<sup>132</sup> Avveduto S. & Brandi, M.C., *Defining Brain Drain: The Evolution of Theories of Brain Drain and Migration of Skilled Personnel* 2nd interim report, CNR, Rome

<sup>133</sup> UNCTAD, *The Least Developed Countries 1997 Report* (New York and Geneva: UNCTAD, 1998) p.

Lost "human capital", as it is called, can have serious consequences. The work of skilled professionals is a precondition for upgrading productive structures and exports, and for improving the sophistication of domestic businesses as well as improve domestic health and education, which benefit entire populations. Without enough trained agronomists, biologists, engineers, scientists, doctors, nurses and information and communication technology (ICT) professionals, it is impossible for Kenyan firms and farms 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.

Emeagwali argues that it is the best and the brightest, the very people most equipped to help improve living conditions at home, that emigrate, leaving behind the weak and less imaginative. In the new world order, economic growth is driven by people with knowledge. This means that the sending country cannot achieve long-term economic growth since it is most talented that should lead others in solving Africa's problems such as creating wealth and eradicating poverty and corruption.<sup>134</sup> In fact, Devesh Kapur and John MacHale argue that the loss of institution builders – hospital managers, university department heads and political reformers, among others – can help trap countries in poverty.<sup>135</sup> Therefore, in the medium and long run, a decrease in human capital seriously affects the country capacity to innovate and adopt modern technologies. Hence, the brain drain impacts negatively on the total factor productivity and increases the distance to the frontier.

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<sup>134</sup> Emeagwali Philip, 'How Do We Reverse the Brain Drain?' Article also available online at <http://www.thenigeriabusiness.com/column5.html>

<sup>135</sup> Devesh Kapur and John MacHale, *Give Us Your Best and Brightest* (New York: Centre for Global Development, 2005) p.49

Besides, Narciso asserts that a reduction in the labour force results in an inward shift of the home country's production possibility curve (PPC).<sup>136</sup> Thus, the productive capacity of the nation falls, which means that economic growth (real GDP) declines. The magnitude by which economic growth decreases is determined by the volume of emigration; the level of education and skills of the emigrants; the amount of money (savings/investment) emigrants take with them; and the scarcity factor is also important. Generally, the more educated and skilled the emigrants, the greater the impact on economic growth.

#### **4.1.2 Class Stratification**

In this regard, brain drain acts as a two edged sword. Doing away with the middle class on one hand yet placing a large gap between the rich and the poor in the sending country.<sup>137</sup>

In the first instance, there exists a two class Kenyan society: a massive underclass that is largely unemployed and very poor people and a few very rich people that are mostly corrupt military and government officials. The emigration of medical doctors to the United States forces the poor to seek medical treatment from traditional healers whose medical professionalism is not approved. This affects the productivity of the sick who may spend more time during the healing process to observe the traditional healers' prescriptions. In the long run, this detracts economic development of the country.

On the other hand, government officials use tax that has been extorted from the poor masses to fly to London for their routine medical checkups and other treatment. This is particularly in light of the fact that members of parliament who earn about one million

<sup>136</sup> Mato Narciso, *Brain Drain In Africa* op. cit., p. 121

<sup>137</sup> Richard Florida, *The Flight of the Creative Class: The New Global Competition for Talent* (New York: HarperBusiness, 2005) p. 17

Kenyan shillings do not pay tax. Overseas medical check-ups are a national disgrace and banning them would force Kenya to re-hire those medical doctors that emigrated to Europe.

In addition, brain drain makes it difficult to create a middle class consisting of doctors, engineers and other professionals since they are the likely candidates of emigration. Consequently, the revenue base is reduced through decreases in incomes and corporate taxes, as well as other forms of tax collections (Value Added Tax). This inevitably affects, amongst other things, government's allocations for education, health and law and order. Kenya needs a large middle class to build a large tax base which, in turn, will enable the country to upgrading public services to its citizens. Although government has continually managed to increase allocations in priority areas, it has not been able to improve the quality of these services substantially. One of the reasons behind this could be that more money has to be spent on current expenditure (higher wages, training costs and hiring expatriate workers) rather than capital expenditure (buildings, equipment and technology). It is argued that Africans who immigrate to the United States contribute 40 times more wealth to the America 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.<sup>138</sup>

Doing away with this middle class also gives rise to poor leadership and corruption because a large educated middle class is the one that ensures the transfer of political power by ballots instead of by bullets. Corruption and poor leadership in turn reduce the pace of economic development of the country.

#### ***4.1.3 Mass Returnees***

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<sup>138</sup> Ibid., p. 26

International migration can also pose the risk of rather serious and sometimes dramatic economic problems and the need to make sudden adaptations when migrants return unexpectedly and in large numbers, as occurred in the aftermath of Iraq's invasion of Kuwait in 1990.<sup>139</sup> This also happened when the Republic of Yemen was obliged to accommodate 800,000 of its nationals forced to leave Saudi Arabia, Kuwait and other states of the region as the Gulf crisis unfolded in the second half of 1990. Returnees place a lot of pressure on public utilities such as hospitals, schools as well as roads and other physical infrastructure.<sup>140</sup>

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#### ***4.1.4 Private Investment and Consumption***

Private investment and consumption spending also decline, as emigrants normally take all their savings/investment when they leave the country. This usually has broader implications on all sectors of the economy. In the Kenyan case, most emigrants are required to have evidence of a bank account with at least half a million Kenya shillings for them to qualify for visa either as students or visitors to the west. An interview with Kenyans who qualified for the Green Card revealed that all of them took with them the money they had gathered in Kenya to help them begin their lives in the new country.

#### ***4.1.5 Remittances***

The proponents of the convergence school hold that the human capital investment made in the high-level migrants are partly recovered through remittances. Although not many economy-wide studies have been conducted on the effects of migrant remittances on African countries, it is often emphasized that while emigration countries lose

<sup>139</sup> Richard Lowry, *Gulf War Chronicles : A Military History of the First War with Iraq* (US: iUniverse , 2008) p. 36

<sup>140</sup> *Ibid.*, p. 37

manpower and particularly the “best and brightest”, they also get something in return.<sup>141</sup> Migrants who work abroad usually send part of their income to their families in the home country. They also contend that remittances promote development by improving income distribution and quality of life by loosening production and investment constraints faced by households in the sending countries. After all, migration decisions are part of family strategies to raise income, obtain funds to invest in new activities, and insure against income and production risks.<sup>142</sup>

The economic impact of remittances has been considered beneficial at both the micro and macro levels. The value of migrant remittances can significantly exceed that of national export earnings. Recent research such as Ozden’s<sup>143</sup> has shown that international remittances are becoming one of the fastest growing and principle sources of foreign exchange for many least developed countries. Global remittances to developing countries reached USD 160 billion in 2004, considerably larger than ODA flows (USD 79 billion) and almost equal to foreign direct investment flows to developing countries (USD 166 billion)<sup>144</sup> In fact, remittances are almost certainly underreported by perhaps up to 50 percent, implying that the returns to international migration are the dominant form of financial flows into developing countries. In some countries remittances are a major source of services exports and foreign exchange. Remittances also bring in more foreign exchange than tea exports in Sri Lanka, more than tourism in Morocco, and in Jordan, Lesotho, Nicaragua, Tonga and Tajikistan, they provide more than a quarter of gross national product.<sup>145</sup>

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<sup>141</sup> Ozden C. & M. Schiff, *International Migration, Remittances and the Brain Drain* (Washington, DC: World Bank, 2005) pp. 151-199

<sup>142</sup> *Ibid.*, p. 155

<sup>143</sup> See Ozden C. & M. Schiff, *International Migration, Remittances and the Brain Drain* (Washington, DC: World Bank, 2005)

<sup>144</sup> World Bank, *Global Economic Prospects* (Washington, DC: World Bank, 2006) p. 593

<sup>145</sup> World Bank, *Migration and Remittances Factbook 2008* (Washington D.C.: World Bank, 2008) p. 10



Some economists like Chami and others tout remittances as the developing world's most reliable and broadly based source of financing, making it effectively a new form of foreign aid. A beneficial aspect of the brain drain, if properly managed, is that it enables emigrants to send a part of their earnings home in the form of remittances, thus providing the home country with a source of valuable foreign currency. It has also been observed that the remittances can have a multiplier effect on the economy as a whole.<sup>146</sup>

Those who argue against the issue of remittances like Adams<sup>147</sup> often emphasize their unproductive nature. They say, not only are remittances insufficient to compensate for human capital losses, they, increase dependency, contribute to political instability, engender economic distortions, and hinder development because they are unpredictable and undependable and encourage the consumption of goods with high import content. The remittances fail to enhance development because they are not spent on investment goods but mostly spent on unproductive purposes – housing, land purchase, transport, repayment of debt, or to a smaller degree wasted on conspicuous consumption, or simply saved as insurance and old age pension funds.

Emeagwali also speaks strongly against remittances and emphasizes the need to eliminate poverty in Africa, and not merely to reduce it by sending money to relatives. He reiterated that in any country, human capital is much more valuable than financial capital because it is only a nation's human capital that can be converted into real wealth. To quote his own words, Emeagwali asserts that 'Money alone cannot eliminate poverty

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<sup>146</sup> Chami Ralph, Connel Fullenkamp and Samir Jahjah, *Are Immigrant Remittance Flows a Source of Capital for Development?* (Washington, DC: International Monetary Fund, 2003) p. 83

<sup>147</sup> Adams Richard and John Page, Do International Migration and Remittances Reduce Poverty in Developing Countries? *World Development* 2003, vol. 33 pp.1645-1669

in Africa, because even one million dollars is a number with no intrinsic value. Real wealth cannot be measured by money, yet people often confuse money with wealth.<sup>148</sup>

Nevertheless, remittances have a strong impact on poverty as they tend to go direct to poor households in developing countries, unlike official development assistance which is channeled through various development agencies and national governments and therefore has a much reduced pro-poor impact at the household level. World Bank analysis on Uganda, Bangladesh and Ghana has shown that the flow of international remittances have reduced poverty by 11, 6 and 5 percent respectively.<sup>149</sup> Work by Adams and Page has shown that an increase of 10 per cent in a country's share of international migrants leads to a 2 percent decline in poverty (measured in US\$ per day terms).<sup>150</sup>

Although the poorest seldom have the means to migrate, remittances have been shown to play an important role in poverty alleviation from migrant households and in sub-national areas of out migration. The consequences of remittances for income inequality depend greatly on the income composition of a given migrant stream. Inequality may increase if migrants are concentrated in upper – income households, but may have a neutral effect, where migrants are fairly evenly distributed across income levels.

Yang finds that remittances have a major impact on reducing the credit constraints to new businesses.<sup>151</sup> In another paper, and using a household survey data from Western

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<sup>148</sup> Emeagwali Philip, 'How Do We Reverse the Brain Drain?' Article also available online at <http://www.thenigeriabusiness.com/column5.htm>

<sup>149</sup> World Bank, *Global Economic Prospects* op. cit., p. 594

<sup>150</sup> Adams R. and J. Page, *International Migration, Remittances and Poverty in Developing Countries* (World Bank: Washington DC, 2004) p. 75

<sup>151</sup> Yang Dean, *International Migration, Human Capital and Entrepreneurship: Evidence from Philippine Migrant's Exchange Rate Shocks* (Washington DC: World Bank, 2004) p. 26

Kenya, Reardon finds that inflows of remittances from migrants are positively correlated with increased demand for education and construction activities in rural areas.<sup>152</sup>

Kenya has profited much from remittances as shown in the table below.

**Table 1: Remittances in US\$ million (2000-2006)**

Year	2000	2001	2002	2003	2004	2005	2006
Remittances	538	517	395	494	371	524	1140*
FDI inflow	541.7	282.0	467.2	429	526	469	473

\* 2.2% of GDP in 2006. This table reports officially recorded remittances. The true size of remittances, including unrecorded flows through formal and informal channels, is believed to be larger.

*Sources: Development Prospects Group.*

The table shows that remittances to Kenya in the selected period are higher than FDI inflows to the country. A World Bank report named Kenya among sub-Saharan Africa's top 10 recipients of migrant remittances for two consecutive years. The report says Kenya was the second highest recipient of remittances in 2007 with \$1.3 billion, up from the \$1.1 billion that the country received in 2006. Other countries mentioned in the report include Nigeria which was the highest recipient, with \$3.3 billion. Other recipients in the top 10 were Sudan with \$1.2 billion, Senegal and Uganda with \$0.9 billion each, South Africa \$0.7 billion, Lesotho \$0.4 billion, Mauritius \$0.2 billion, Togo \$0.2 billion and Mali \$0.2 billion. In the case of Kenya, the report asserts that the remittances in 2006, all of which came from workers, constituted 5.3 per cent of the country's GDP.<sup>153</sup>

#### **4.1.6 Relieving Unemployment**

It is argued that international migration encourages economic development and benefits both sending and receiving countries. Obviously, developed economies benefit

<sup>152</sup> Reardon Thomas, 'Using Evidence of Household Income Diversification to Inform Study of the Rural Nonfarm Labour Market in Africa' *World Development* 1997 pp. 735-47

<sup>153</sup> World Bank, *Migration and Remittances Factbook 2008* op. cit., p. 12

by improving their global competitiveness through importing both the skilled and unskilled labour they need. Another view is that in Africa's stagnating and deteriorating economies, emigration contributes to development by relieving unemployment. An examination of the relationship between unemployment rates and emigration in Kenya reveals a proportional correlation where an increase in emigration prompts a decrease in unemployment rate. As unemployment rate decreased from 50 percent in 1998 to 40 per cent in 2007, emigration increased by 20,000 people in 2006 from 2000.

Some economists suggest that brain drain does not lead to a loss in economic welfare of the home country, mainly because there are other workers who can replace the emigrants quite easily. The primary assumption underpinning this view is that there exists a surplus pool of labour from which replacement workers can be drawn.

The contrary argument is that emigration does cause welfare losses to the home country. This is based on the view that the surplus pool of labour may not be able to successfully replace the highly skilled workers who have left, as they lack the necessary qualifications and experience. This is most likely to occur in highly skilled professions, particularly in the areas of health, education and other specialized services. In Kenya for example, this surplus pool of labour has adequately filled the vacuum created in certain professions, in particular in areas of administration, sales, tourism services and production. However, there are some critical areas, such as the medical profession, teaching and other specialized services, where labour shortages are most acute and still exist today. This is because there is already a limited supply of workers in these areas.

It is also argued that the efficiency (productivity) of those who replace the emigrants is generally lower. This often results in a reduction in economic growth. In some instances the same level of economic growth may be achieved, but at a higher cost.

Training replacement workers, so that earlier levels of economic growth can be obtained with greater efficiency, is likely to incur additional expense. This implication was reflected in the UNDP Human Development report, where Kenya's human development index declined from 0.534 in 1985 to 2005 in 0.521.<sup>154</sup>

Also, it may be hard to achieve and sustain a higher level of economic growth in the long-run, as continual emigration will mean that the work force will always be relatively inexperienced. Furthermore, the standard of education and health may drop as more quality teachers and medical personnel emigrate, leading to a general decline in Kenya's economic welfare.

On the contrary however, other scholars dispute this contention. For example, Bhagwati and Hamada show that even in the case where skilled workers are involuntarily unemployed in the home country (and their marginal productivity is plausibly small if not nil) the brain drain may be detrimental to the home country.<sup>155</sup> Therefore, allowing unemployed or underemployed doctors to migrate may not necessarily raise home welfare. First, in the absence of the possibility to migrate abroad, the doctor may have moved inland where his social marginal productivity is likely to be high. Second, the increase in the return to education may prompt more workers to seek education, even more so if the domestic wage of domestic skilled workers tend to catch up with its foreign level. Skilled unemployment would then go up if the increase in the supply of skilled workers combined with the fall in their demand more than offsets the impact of skilled migration.

Besides, income per capita of those left behind will fall on the account both of the larger costs of education (which reduce home GDP) and the fall in skilled employment.

<sup>154</sup> UNDP, *Human Development Report 2007/2008* (Geneva: UNDP, 2007) p. 73

<sup>155</sup> Bhagwati J.N. et K. Hamada, 'The Brain Drain, International Integration of Markets for Professionals and Unemployment' *Journal of Development Economics* Vol. 1 Issue no. 1, 1974 pp. 19-42: 25

Bhagwati and Hamada aptly conclude that “in the society where welfare function depends on per capita income and unemployment rate, national welfare will quite possibly go down”.<sup>156</sup>

#### ***4.1.7 Experienced Returnees***

Return migration has a significant bearing on the impact of the brain drain. Saxenian contends that returnees may bring back home not only their original skills but also those that they have acquired during their stay in the host country. These include enhanced skills, personal connections, ideas for innovation and increased access to trade, investment, knowledge and technology from strong overseas ties with expatriates.<sup>157</sup> The original loss to the home country may then be offset by the new and valuable skills that the migrants were able to acquire abroad. Furthermore, a temporary move abroad may be a key component of a strategy designed to overcome domestic market failures. For instance, if because of credit market imperfections a home country resident is unable to undertake a profitable project, then a temporary stay abroad may allow him to accumulate sufficient capital to finance such a project. Similarly, in the absence of complete insurance markets, a home country household may be unwilling to undertake a high return but high risk project. Temporary migration, until the uncertainty about the project is resolved, may offer a way out. Indeed, the household may reduce its risk exposure by having some of its members migrate to a country where returns are not perfectly correlated with the domestic economy. It may then be in a better position to take on additional risk and hence to implement the project.

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<sup>156</sup> Ibid., p. 25

<sup>157</sup> Saxeenian A., ‘Bangalore, the Silicon Valley of India?’ *CREDPR Working Paper* No 91, Stanford University, 2001

This contention has become a reality in the Kenyan context since it has gained from returnees as follows; Kiraitu Murungi is one of the top politicians in the country, Phillip Ochieng and Tom Mshindi are renowned journalists and Igara Kabaji a leading lecturer. Kenya also benefited from the innovation of returnee Prof. Arthur Obel in his attempt to find cure for the HIV/AIDS epidemic.

Other scholars argue that returnees may be those that have not succeeded abroad. Migrants will typically return home if their initial expectations about wages and working conditions abroad are not met. In Duleep's definition, these are "mistaken migrants".<sup>158</sup> Negative selection of returnees may also occur if skilled migrants are in a better position to acquire new skills, say language proficiency, in the host country. Therefore, returnees will be those with more limited skill initially and lesser skill accumulation abroad. Moreover, as already noticed, skilled migrants may be more willing to reunify with their families in the host country or face lesser constraints in their ability to do so.

There is also in addition some evidence that returnees have difficulties in readapting to the economic and social environment of their home country.<sup>159</sup> Often, as observed by Knerr for Pakistan, skilled returnees tend to be unemployed for longer periods. Finally, as argued previously, if skilled migrants are more able or more willing to reunify with their family, the home country residents will be further penalized by the decline in remittances.<sup>160</sup>

#### **4.1.8 Brain Circulation**

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<sup>158</sup> Duleep H. O., 'Social Security and the Emigration of Immigrants' *Social Security Bulletin* Vol. 57, 1994 pp. 37-52

<sup>159</sup> Dustmann C., 'Return Migration: The European Experience' *Economic Policy* Vol. 22, 1996 pp. 215-49

<sup>160</sup> Knerr B., 'Labour Migration from South Asia: Patterns and Economic Implications', in D. O'Connor, and L. Farsakh (eds), *Development Strategy, Employment and Migration: Country Experiences* (Paris: OECD Development Centre, 1994) p. 63-84:72

Finally, an argument popularized by the work of Anna Lee Saxenian on IT production in the United States, India and Taiwan, holds that, as globalization develops over time, brain drain eventually leads to “brain circulation,” a “win-win situation” in which “everyone” becomes “better off.” Noting that Silicon Valley was built with the heavy input of immigrant engineers and entrepreneurs from India and Taiwan, who subsequently returned to their home countries to build linked IT sectors in Bangalore and Hsinchu-Taipei, Saxenian offers a staged or progressive model for thinking about the social and economic significance of skilled migration. The brains who leave today come back tomorrow, to the greater benefit of sending and receiving countries alike. Saxenian’s theory has been given added traction by the rise of South and East Asia in the global economy.<sup>161</sup>

Throughout the 1950s, 1960s, and 1970s Kenyans were engaged predominantly in circular migration in search of higher education and advanced training abroad, which was then later applied to nation-building through employment in Kenya.<sup>162</sup> Some of the graduates from this period include President Kibaki, who, like Kenyatta before him, attended the London School of Economics. Several cabinet members and top officials in the current Kenyan government also studied in Europe, North America and even Asia.

Moreover, Yash Pal Ghai used his expertise in constitution making in other countries to help the country when it was in need of a new constitution through the Constitution of Kenya Review Commission (CKRC). Besides, Kenya also benefits from the experience and expertise of Prof. Ali Mazrui’s work as a lecturer and administrator in universities three continents; Africa, USA, Europe. He is the chancellor of Jomo Kenyatta University of Science and Technology.

<sup>161</sup> Saxenian A., ‘Bangalore, the Silicon Valley of India?’ op. cit., p. 6

<sup>162</sup> Sharon Stichter, ‘Migrant Labour in Kenya: Capitalism and African Response 1895-1975’ *Canadian Journal of African Studies* Vol. 18, No. 2, 1984, pp. 445-447



#### 4.1.9 Educational Achievements

The revisionist approach holds that brain drain may foster growth by raising the return to education. Stark holds that the sheer possibility to migrate increases the return to education, thereby fostering further investments for skill acquisition and ultimately boosting growth.<sup>163</sup> Beine and others also provide some cross-country evidence in support of such claim.<sup>164</sup>

Commander and others also support that brain drain can further benefit sending countries by raising overall levels of education among their populations. This “beneficial” or “optimal” brain drain hypothesis claims that the prospect of emigration for the highly educated to seek greater riches abroad leads individuals to make investments in education they wouldn’t make otherwise. Since not all of these individuals end up emigrating, the outcome for the sending country is a net brain gain that is actually dependent upon the existence of a steady brain drain.<sup>165</sup> Concern over migration of the highly skilled needs to be turned on its head, for such migration can be a harbinger of human capital gain, not the culprit of human capital drain, irrespective of whether a sending country receives any remittances or returns from its expatriate population.

Bhagwati and Hamada already recognized that migration prospects encourage students to study more intensively, by increasing the expected returns to human capital.<sup>166</sup> Nevertheless, the risk is that students could opt for internationally applicable diploma.

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<sup>163</sup> Stark O. and Y. Wang, ‘Inducing Human Capital Formation: Migration as a Substitute for Subsidies’ *Journal Public Economics* vol. 86 Issue no. 1, 2002 pp. 29-46

<sup>164</sup> Beine M., F. Docquier and H. Rapoport, ‘Brain Drain and Economic Growth: Theory and Evidence’ *Journal of Development Economics* vol. 64, Issue 1, 2001 pp. 275-89

<sup>165</sup> Commander, S., M. Kangasniemi & A. Winters, ‘The Brain Drain: Curse or Boon?’ Discussion Paper No. 809. (Bonn: Institute for the Study of Labor, (2003) p. 53

<sup>166</sup> Bhagwati J.N. et K. Hamada, ‘The brain drain, international integration of markets for professionals and unemployment’ op. cit., p. 29

Among others, Lucas reports that the choice of major field of study (medicine, nursing, maritime training) among Filipino students respond more to shifts in international demand than to national needs. When foreign and national countries have different needs, the perspective of migration can lead to important shortages in some sectors. Specific shortages can be strongly harmful for developing countries.<sup>167</sup>

This may prove true to Kenya given its sharply increasing literacy rates which were 78 percent in 1980 and 95.8 in 2005.<sup>168</sup> The more people migrate, the more others go to school. They could be enticed to take advantage of subsidized education in the country which now encompasses free primary and secondary education.

Poutvaara addresses this important issue in a theoretical model where the possibility of a brain drain distorts the provision of public education away from internationally applicable education towards country-specific skills. Country-specific skills may include tertiary education with national emphasis, like degrees in law and certain humanities, and also secondary education, which is less mobile. Correspondingly, internationally applicable education may include, in addition to science-based, commercial and other internationally applicable degrees in tertiary education, those held in secondary education (like nurses) which are internationally mobile. At the end, this means educating too few engineers, economists and nurses and doctors, and too many lawyers. Poutvaara shows that such an outcome could be avoided by introducing graduate taxes or income-contingent loans, collected also from migrants. By giving the providers of internationally applicable education a stake also in efficiency gains earned elsewhere,

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<sup>167</sup> Lucas R.E.B., 'International Migration Regimes and Economic Development' *Report for the Expert Group on Development Issues* (EGDI), Swedish Ministry of Foreign Affairs, 2004

<sup>168</sup> Kenya National Bureau of Statistics, *Basic Report: Kenya Integrated Household Survey 2005/6* (Nairobi: Ministry of Planning and National Development, 2007) p. 46

graduate taxes would encourage sending countries to invest more in internationally applicable education.<sup>169</sup>

#### ***4.1.10 The Skilled Diaspora***

It is also noted that the creation of migrants' networks facilitates the further movement of persons, the movement of goods, factors, and ideas between the migrants' host and home countries. Such 'diaspora externalities' are now analyzed by economists in the field of international trade. In many instances indeed, and contrarily to what one would expect in a standard trade-theoretic framework, trade and migration appear to be complements rather than substitutes.

Using cross-section data, Docquier and Lodigiani find evidence of important network externalities in a dynamic empirical model of FDI-funded capital accumulation. Their analysis confirms that business networks are mostly driven by skilled migration. Skilled migration thus stimulates aggregate FDI inflows in the origin country. These network effects are stronger in democratic countries as well as in countries exhibiting intermediate corruption index. They provide a panel extension with 83 countries and 4 periods and confirm the existence of business network externalities.<sup>170</sup> Similarly, Rapoport and Kugler also found strong evidence of a complementarity between FDI and skilled migration, with an average elasticity of 3 percent. Diaspora externalities would then constitute an important channel through which the brain drain positively affects sending countries. Even when the brain drain depresses the average level of schooling, it

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<sup>169</sup> Poutvaara P., 'Public Education in an Integrated Europe: Studying to Migrate and Teaching to Stay' *CESifo Working Paper*, no. 1369, 2004

<sup>170</sup> Docquier F. and E. Lodigiani, *Skilled Migration and Business Networks* (Mimeo, Université, 2006) p.

is likely to increase FDI inflows.<sup>171</sup> The size of the diaspora matters. Business externalities are likely to be stronger in large countries. On the contrary, small countries are less likely to benefit from skilled diasporas.

Kenya has also put in place the Kenya Diaspora Network (“The Network”) which is a non-political organization whose primary objective is to support the Kenyan Government development efforts by aligning the resources and inherent knowledge of Kenyan Organizations in the Diaspora with the Government's Economic Recovery Plan (GERP) and with the Donors' Country Assistance Plans. The Network was formed by the Kenyan government in conjunction with the World Bank Institute and Western Hemisphere African Diaspora Network (WHADN-an initiative of the AU).<sup>172</sup>

#### **4.2 Conclusion**

In addition to both the negative and both positive impacts of brain drain on economic development in Kenya as evidenced above, this section attempts to correlate generally emigration figures with GDP over a period of twelve years. It is worth noting that migration is not synonymous to brain drain since not all people who emigrate comprise skilled workers.

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<sup>171</sup> Kugler, Maurice and Hillel Rapoport, 'International Labor and Capital Flows: Complements of Substitutes?' 2006 p. 3

<sup>172</sup> Find information online at <http://www.kenvadiaspora.org/>

**Table 2: A Correlation between Number of Emigrants and GDP of Kenya (1995-2007)**

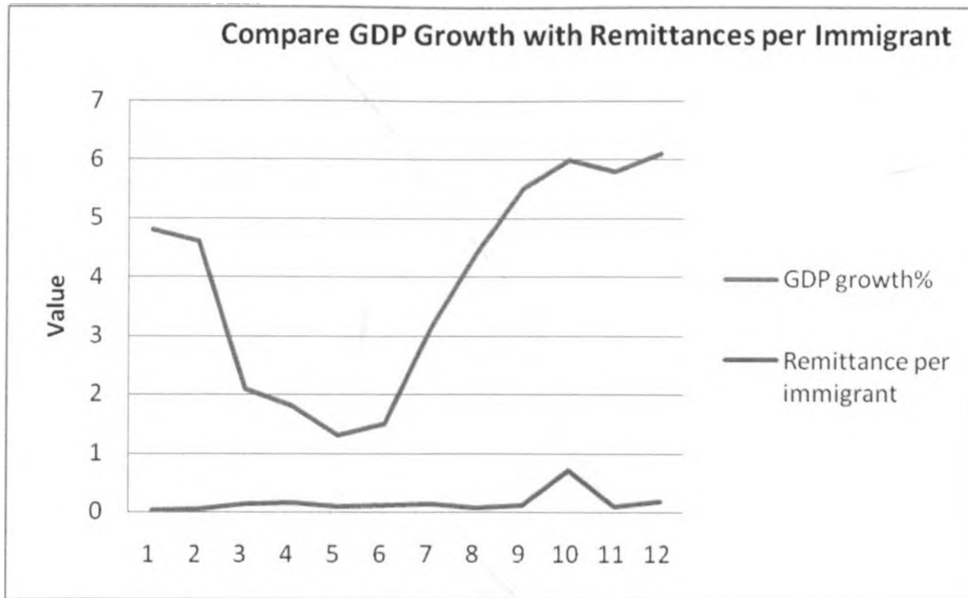
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
GDP growth (%)	4.8	4.6	2.1	1.8	1.3	1.5	3.1	4.4	5.5	6.0	5.8	6.1
No. of immigrants to the US and UK	2100	2300	1800	2200	2400	4500	3500	4700	3970	5230	5720	6450
Remittance per immigrant	0.03	0.06	0.14	0.17	0.10	0.11	0.15	0.08	0.12	0.71	0.09	0.18

Source: Economic Survey,

In general, the table illustrates that there is no linear relationship between GDP growth and the number of Kenyan immigrants to the US and UK. This implies that the impact of brain drain on economic development in Kenya is mixed. Therefore, it cannot be argued that brain drain has a detrimental effect on economic development as one of the hypotheses of this study had alluded earlier. This is in line with Edward Taylor's argument that the impact of brain drain on economic development lies somewhere between the two extremes. It all depends on the context of the countries and communities who are involved.<sup>173</sup> In short, the relationship between migration and development is multidimensional and complex.

<sup>173</sup> Taylor, J Edward, 'The New Economics of Labour Migration and the Role of Remittances in the Migration Process' *International Migration* Vol. 37 Issue 1, 1999 pp. 63-88

**Figure 2: Compare GDP growth and Remittances**



**Key**

1 - 1995	5 - 1999	9 - 2003
2 - 1996	6 - 2000	10 - 2004
3 - 1997	7 - 2001	11 - 2005
4 - 1998	8 - 2002	12 - 2006

The above graph illustrates that remittances affect GDP growth because when remittances increased from 0.1 USD in 2003 to 0.7 in 2004, the GDP grew from 5.5% to 6%.

## CHAPTER FIVE: CONCLUSIONS AND POLICY RECOMMENDATIONS

### Introduction

International migration of talented people is as old as the early history of mankind. While such movements did not attract a lot of attention in the past, it became a problem especially from the 1960's when the trend became lopsided with Western Europe and North America being besieged by talented people from the less developed countries (LDCs). The risk of a brain drain damaging rich countries is arguably lower, but it does exist.<sup>174</sup> One central question that has caused a lot of controversy has been whether brain drain has positive or negative impact on developing countries. This formed the basis of the study which sought to assess the effects of brain drain on economic development in Kenya.

This being the last chapter of the dissertation, it provides the summary and conclusions of the study and gives recommendations on how brain drain can be turned into brain gain.

Such trends in human capital flight from the continent to developed countries have necessitated the establishment of concrete intervention strategies. It is against the backdrop that this study engages in an investigation of the implications of brain drain on economic development in Kenya. The findings of this study seek to settle the question of whether loss of human capital deters economic growth and whether it is worth to engage in expensive initiatives in order to reduce it.

To lay the basis upon which this problem will be tackled, debates on brain drain as a motor or brake of economic growth were reviewed. The literature also looks at particular case studies from the developing world with the view to understand the many

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<sup>174</sup> Heenan, David, *Flight Capital: The Alarming Exodus of America's Best and Brightest* (New York: Davis-Black Publishing, 2005) p. 12

implications of brain drain in different economies in the world. In this chapter, the endogenous growth theory was proposed as a guide to the study. This is primarily due to its major tenet which holds that the enhancement of a nation's human capital will lead to economic growth by means of the development of new forms of technology and efficient and effective means of production.<sup>175</sup> This assumption coincided with the major hypothesis of the study that weakness in human capital and particularly skill deficiency is a drag on investment and growth in Africa.

Although brain drain is a social index that is difficult to measure, chapter two attempted to investigate the extent of Brain Drain in Kenya. It established that the current statistical evidence of brain drain in Kenya is weak due to generally non-existent personnel information systems, but the qualitative and anecdotal evidence was quite revealing. According to Okoth, as of 2001, there were 47,000 Kenyans in the United States, 20,600 in Canada, 15,000 in the United Kingdom, 6,900 in Australia, 5,200 in Germany and 1,300 in Sweden.<sup>176</sup> Given the traditional orientation of the impact of brain-drain on the quality and delivery of public and private services, Kenya saw that it was imperative to devise strategies of 'brain gain'. However, forty years later and the success of these strategies is still a point for debate.

The dissertation also established that developed countries continue to deprive Kenya of millions of dollars worth of investments embodied in her human resources. If the current trend of poaching of scarce human resources from Kenya is not curtailed, the chances of achieving the Millennium Development Goals would remain bleak. Such continued plunder of investments embodied in human resources contributes to further underdevelopment of Kenya and to keeping a majority of her people in the vicious circle

<sup>175</sup> Aghion P. and Howitt P., *Endogenous Growth Theory* (Cambridge, Mass.: MIT Press, 1998) p. 4

<sup>176</sup> Okoth Kenneth, *Kenya: What Role for Diaspora in Development?* (Washington, D.C.: Migration Policy Institute, 2003) p. 29



of ill-health and poverty. Therefore, it proposed that both developed and developing countries need to urgently develop and implement strategies for addressing this human resource crisis.

The study assesses economic development in Kenya in a historical manner in order to find links with human capital flight. Given that Kenya's growth performance has substantially varied over time, it delineates the various episodes of economic performance into the colonial and post-independence époques. It draws a general trajectory of economic development of Kenya since the colonial times. This was imperative following the extent of brain drain in Kenya because it will form the basis of analysis in the following chapter where the impact of brain drain on economic development in Kenya will be carried out. It was established that the GDP growth rate of Kenya has declined continuously from a peak of about 6.5% per year during the decade 1963 – 72, to less than 4% per year in the following decade, to, more recently, only about 1.5% per year during the 1990's. GDP actually fell about 1.2% in year 2000. The growth rate was only about 1.1% in 2002.

Chapter four critically analyzes the implications of brain drain on economic development in Kenya. This is done by cross examining the data collected in the previous chapters on the extent of brain drain in the country and on the trajectory of economic development in Kenya. Based on evidence that Kenya has experienced significant brain drain, the chapter tests the hypothesis that the consequence of an increase in brain drain is a slower economic growth rate for any country. A number of areas through which brain drain impacts on economic development in Kenya were identified. These include loss of human capital, class stratification, mass returnees, private investment and consumption, remittances, relieving unemployment, experienced returnees and brain circulation,

educational achievements and the skilled Diaspora. The study concluded that the relationship between migration and development is multidimensional and complex and therefore it cannot be argued that brain drain has a detrimental effect on economic development as one of the hypotheses of this study had alluded earlier.

Despite this conclusion, severe effects of the human capital flight to developed countries from developing nations need to be addressed. More importantly, strategies to transform brain drain into brain gain should be put in place. The following section gives recommendations on what Kenya can do to mitigate the adverse effects of brain drain.

### **5.1 Policy Recommendations**

As noted earlier, international brain drain has been a problem to LDCs as a whole and will remain so if some measures are not taken to check the phenomenon. In this rather short and qualitative assessment we have identified some factors responsible for this phenomenon in Kenya. While financial and economic factors are the main push factors, other social and political factors are responsible for intellectual flight.

Strategies that aim to limit the movement of persons are likely to be ineffective at best – approaches instead need to optimize the impact of greater international mobility through a better understanding of the linkages between poverty, migration and development. Taking a longer-term view and one that looks beyond an individual sector to the benefits to the whole country would suggest that migration and remittances have the potential to improve health and social outcomes. This means that the influence of donors (like the UK's DFID) which tends to focus on a specific sector and have a shorter timescale, should be secondary to those of the country as a whole.

Amin and Freund point out that that some sort of loan scheme might be an effective means of mitigating the loss of skilled personnel.<sup>177</sup> In the context of the ongoing Economic Partnership Agreement (EPA) negotiations between the countries of Eastern and Southern Africa and the EU, the authors recommend that an EPA, while providing for improved (so-called Mode 4) access to the EU, should also provide training and technical assistance to compensate African governments which carry the cost of training skilled workers, which then emigrate to the EU.

Temporary migration schemes have recently been advocated as a way of maximizing the potential of migration by the UN Global Commission on International Migration.<sup>178</sup> A recent joint study by the COMESA Secretariat and the Commonwealth Secretariat proposes a "managed temporary migration scheme" for nurses, with a pilot programme for four sending countries, including Kenya. The study includes a number of recommendations to ensure that migrant professionals return to their country of origin.

Some of the recommendations are valid, such as recognizing experience earned abroad in the career progression structures in sending countries. However other recommendations, such as ensuring that work permits are not renewed after a specified period of time may violate the human rights of the migrant. In reality, any scheme which attempts to force migrants to return home through compulsion, rather than offering fair incentives, is likely to fail and cause undue stress. In addition, a managed scheme where migrants are selected through an official government programme, rather than based on merit-based recruitment in the market, is likely to be open to corruption and distortion.

Another potential solution that has been presented is to separate medical professional training in developing countries into two tracks: an "advanced training

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<sup>177</sup> Mohammed Amin and Caroline Freund, *Migration and Remittances in ESA Countries* (Washington, DC: The World Bank, 2005) p. 70

<sup>178</sup> Global Commission on International Migration <http://www.gcim.org/en/> accessed 27/6/08

programme" and a "basic training programme". Staff trained on the basic programme would be not qualified enough to be recruited abroad but would help address the some health needs of the population and are cheaper to train and employ – indeed

In terms of improving the incentives for migrants to remit, there is much that the Kenyan Government could also do to facilitate increased remittances by migrants such as permitting the holding of foreign currency denominated accounts by kenyans working abroad, without any requirement to convert foreign currency into the Kenyan shilling. Reducing the cost of sending money from the Western countries to Kenya would also improve the incentives to remit, particularly for smaller, regular amounts. Remittances have risen significantly as wiring charges for sending money home have declined over the last ten years.

While it may also be tempting, from a social justice aspect to tax the remittances of migrant health workers, any policy measure that reduces the incentives to remit is likely to reduce the positive effects of remitting foreign currency earnings back to Kenya. A more workable solution might be for the Kenyan Government to enter into an agreement with the Western countries whereby a portion of income tax or national insurance levied on migrant earnings there is remitted to the Kenyan Government for reinvestment in public sector. Such a scheme would not affect the incentives of the migrant to remit as the income transfer would be purely from developed country government to developing country government.

Besides, Kenya should try to keep its trained professionals by providing better employment and career opportunities. It should also establish programmes to lure emigrants back home, at least for temporary periods, to contribute to domestic economic

growth and knowledge and it should build links with the diaspora in industrialized nations to stimulate flows of technology and know-how.

To address these welfare losses, government needs to have both short and long term strategies in place. Labour shortages in critical and technical areas such as medical, education and other finance related disciplines should be addressed immediately. Government could explore the possibility of hiring expatriates. Locals could understudy these expatriates so that Kenya benefits in the long run. In addition, attractive remuneration packages could be provided to former residents to draw their services back into the country. Government could also review immigration policies to allow dual citizenships. However, these are only temporary measures. Government needs to put in place various strategies to ensure that emigration is curbed. Some of these initiatives include to ensure political stability, to maintain law and order, sincere efforts must be made to create a national identity that encompasses all citizens. The government must continue to promote and practice accountability and transparency to foster better relationships between government and the public; government should ensure industrial stability. It should emphasize that unions and employers need to work closely on issues such as wage setting, hiring workers and redundancy packages; provide better education and health facilities at a lower cost. The education system needs to be restructured in order to cater for the changing needs of society and the economy, in terms of globalization and information technology. Similarly, the health system must undergo continuous improvement so that it can provide a wide range of modern medical services; and to look into providing competitive remuneration packages for highly skilled professionals to encourage them to remain in the country. Some organizations are already moving in this direction.

From the available evidence, this research concludes that the relationship between migration and development is multidimensional and complex. Issues that can be analyzed for further research include examining the best strategy for brain gain in developing countries.

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