

CHALLENGES OF RETAINING SKILLED EMPLOYEES, THE CASE OF ERITREAN PUBLIC SECTOR

Mussie T. Tessema and Alex M. Ng'oma

ABSTRACT

This article uses the public sector in the sub-Saharan nation of Eritrea to illustrate how the problem of brain drain poses severe challenges to developing countries. Following its analysis of the views of 313 Eritrean public servants, the article comes to the conclusion that deteriorating economic conditions, lack of good governance and political instability are the major causes of the brain drain in developing countries. On that basis, the article suggests some policy implications as well as frontiers for possible future research.

INTRODUCTION

Every organization, whether public, private, or NGO, needs people through whom to conduct its business. Public organizations, in particular, are judged by the performance of their human resource. As Ingraham and Kneedler (2000: 245) observe, “government activities are typically highly personnel intensive.” Thus, having skilled, motivated, and committed public servants is cardinal for the success of public organizations. Nonetheless, developing countries (DCs) have a severe shortage of highly skilled public servants. According to a recent report, a number of DCs are facing a severe shortage of qualified personnel due to the brain drain (Aredo, 2002; Das, 1998; Mutume, 2003; Selassie, 2002; Oduba, 2003; Aredo, 2002). Haddow, (quoted in Cohen and Wheeler, 1997: 125), notes that:

“The government must train four officers to retain one for a long period of time... [this] serious retention problem... is reaching alarming proportions...[it] must be addressed squarely...[efforts must be made] to change and improve the management and utilization of trained professionals in Government so as to create an environment in which graduates will enjoy a challenging and rewarding professional career in the civil service”.

One of the major challenges faced by the public sector in the DCs is the inability by the governments to attract, motivate and retain professionals needed to run the public service. The public sector has been adversely affected by the international emigration of skilled nationals (the so-called brain drain). This problem, which was recognized as early as the 1960s (Adams, 1968), is best illustrated by the public sector in Eritrean.

Eritrea, the youngest sub-Saharan African nation, became a sovereign State in 1993. During the 30-year liberation war with Ethiopia (1961-1991), about a quarter of Eritreans lived overseas in exile. Many of these were actually highly skilled individuals

(World Bank, 1994)¹. In 2007, the population of Eritrea was 5 million people (U.S. Department of State, 2008). After independence in 1993, the Eritrean government was bequeathed with a very low human capital base. To address the situation, the government started a number of training programs (EHRD, 2003; UNDP, 2002; Tessema et al., 2005). Some of those programs were: the establishment of the Eritrean Institute of Management (EIM) in 1995; the establishment of new, and the revitalization of the old, ministry-based training centers; the encouragement of overseas scholarship; and the launching of the Eritrean Human Resource Development Project (EHRDP) (1998-2005), which was a major HRD project. The EHRDP, which was initiated in 1997, under the auspices of a soft loan from the World Bank, offered: 674 overseas scholarships consisting of 132 BA degrees, 534 MA degrees and 8 PhDs); 1037 domestic, civil service-oriented scholarships consisting of one-year certificate courses, two-year diploma courses and four-year degree study programs at the University of Asmara; and finally, 889 public service, long distance education scholarships with Universities in South Africa (EHRDP, 2003).

As a result of these efforts by the government, the educational levels in the Eritrean civil service began to look brighter, especially in the first ten years after independence. In 1994, barely a year after independence, about 8 percent of the civil servants were illiterate; only 6 percent had a BA degree or higher, while about 52 percent were at least high-school graduates. However, as of March 2002, only 0.8 percent of the civil servants were illiterate, about 11 percent had a BA degree or higher, while about 73 percent were high-school graduates or higher (CPA, 2002; Tessema et al., 2005). Unfortunately, the brain drain has drastically undermined the successes scored by the government's manpower development initiatives. For instance, 64 percent of the 674 nationals who were awarded overseas scholarships did not return home to work in the civil service as expected. That, in turn, deprived the government of the services of qualified citizens it needed to engender sustainable development (Ghebregiorgis, F. & Karsten, 2007; EHRDP, 2003; Tessema et al., 2005).

This article seeks to answer the following two questions: What are the perceptions of the Eritrean civil servants regarding the prevailing high rate of brain in Eritrea? And what are the main causes and challenges of the brain drain in DCs like Eritrea?

LITERATURE REVIEW

The international migration of skilled workers (known also as the brain drain) is a complex phenomenon; its causes, impact, and victim as well as beneficiary countries have attracted the increased attention of policymakers, scientists and international agencies in the recent years (Docquier, Lohest, and Marfouk, 2007). Different studies have provided different figures with regard to the migration of skilled workers from DCs in general and the African continent in particular. The UN Economic Commission

¹ According to an unpublished document of the Government of Eritrea (2004), about 530,000 Eritreans lived in exile: 80,000 in North America, 90,000 in Europe, 70,000 in the Middle East, 120,000 in Sudan, and 170,000 in the rest of World and Ethiopia. Many of these were highly educated.

for Africa (UNECA) and the International Organization for Migration (IOM) estimate that 27,000 highly qualified Africans left the continent for industrialized countries between 1960 and 1975. The number increased to approximately 40,000 between 1975 and 1984, and then almost doubled by 1987, representing about 30 percent of the highly skilled manpower stock (Onyango-Obbo, 2005). Africa lost 60,000 professionals (doctors, university lecturers, engineers, etc.) between 1985 and 1990, and has been losing an average of 20,000 annually ever since (Oduba, 2003). Onyango-Obbo (2005) notes also that every year, 20,000 professionals leave Africa as part of the brain drain, bringing the number in Europe and North America to more than 300,000. Of these, about 30,000 are PhD-holders. "At least one-third of science and technology professionals from DCs are currently working in the industrialized nations" (Selassie, 2002: 5). Marfouk's study (2008: 6) shows that

"10 out of the 53 African countries have lost more than 35 per cent of the their tertiary educated labor force and countries such as Cape Verde (68 percent), Gambia (63 percent), Seychelles (56 percent), Maurice (56 percent) and Sierra Leone (53 percent) suffered from a massive brain drain."

A recent study by Clemens and Pettersson (2007: 13) indicated that:

Approximately 65,000 African-born physicians and 70,000 African-born professional nurses were working overseas in a developed country in the year 2000. This represents about one fifth of African-born physicians in the world, and about one tenth of African-born professional nurses. The fraction of health professionals abroad varies enormously across African countries, from 1% to over 70% according to the occupation and country.

Docquier and Marfouk's (2006) study also asserts that, by 2000 there were 20 million highly skilled immigrants [foreign-born workers with tertiary education level] living in the OECD member countries, a 70 percent increase in ten years against only a 30 percent increase for unskilled immigrants.

These figures indicate that the brain drain is not uniquely an African affair; rather it is global in scope. In recent times, many nations in the developed world have been also hit just as hard by the brain drain phenomenon². The brain drain is in itself not a new phenomenon; rather, it has only gained momentum in recent years.

² The brain drain affects both developed and developing countries alike. It could be, for instance, from Canada and Great Britain to the US, and vice versa (see also Docquier & Marfouk, 2006; Oduba, 2002; Smyke, 2001). About 80 percent of Indian computer programmers migrate to the USA (Oduba, 2003), about 25 percent of Iran's highly qualified personnel have migrated to the West (Mutume, 2003), and significant number of highly skilled workforce migrated from South American countries to the US (for details, see Carrington and Detragiache, 1999).

Pioneering studies on the brain drain identified both positive and negative sides to it. Development experts were quick to point to the adverse impact of the brain drain on DCs. Their argument was that, DCs bore the cost of raising and educating professionals, but only to come and lose them to other countries, especially the industrialized western societies (Ngunjiri, 2001; Oduba, 2003). Indeed, the brain drain does not only cost DCs billions³ of dollars; it also creates a huge deficit⁴ of skilled manpower in the labor force (Clemens and Pettersson, 2007; Docquier, Lowell, and Marfou, 2007). On the other hand, opponents counter-argued that the brain drain has a number of advantages which include: immigrants' remittances of incomes, transfer of knowledge and technology, and investment in countries of origin (resulting from venture capital)⁵ (Gubert, 2005; Meyer and Brown, 1999; Docquier and Rapoport, 2004; Docquier and Rapoport, 2007; Straubhaar and Vadean, 2005). An international conference held in 2004 in Marrakech did acknowledge the significance of the foregoing benefits that accrue to the DCs as a result of the "brain drain" (Straubhaar and Vadean, 2005). For instance, in 2004, remittances of incomes to DCs exceeded official development aid or incomes from the export of goods and services in several of these countries - they totaled USD 126 billion, according to IMF estimates (OECD, 2005). The issue of remittances and that of economic growth registered during the last decade have attracted increasing interest and attention in several international organizations (IMF, World Bank, OECD), at a time when the volume of official development aid is diminishing.

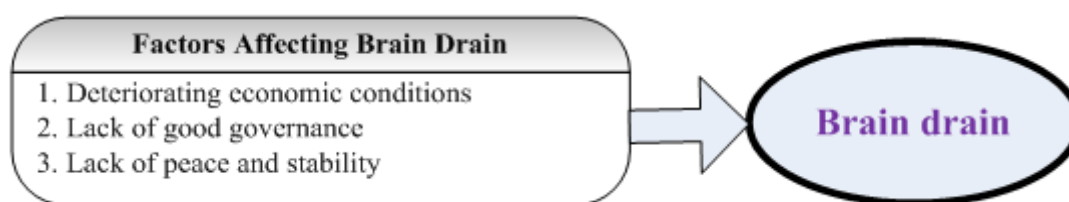
According to the review of the literature on the brain drain in DCs in general and on the African continent in particular, three factors are largely the driving force behind the brain drain: deteriorating economic conditions, lack of peace and stability, and lack of good governance (see Figure 1 below).

³ It should be noted that the issue of investment in skills needs a more careful treatment. This is because many of those working overseas also invest their own resources or receive training outside of their initial home country through other funding organisations.

⁴ The impact of "brain drain" of professionals from LDC has long been recognised. In December 1998, UN General Assembly Resolution 2417 noted "with concern that high skilled personnel from the LDC continue to emigrate at an increasing rate to certain developed countries, which in some cases may hinder the process of economic and social development in the LDC" (see Physicians for Human Rights, 2004: 16).

⁵ A recent survey by the Public Policy Institute of California revealed that foreign-born Chinese and Indian highly skilled immigrants in Silicon Valley have successfully adopted the technology capability and venture-financed high growth business models that distinguish many USA firms in the high technology sectors. Many have set up subsidiaries, joint ventures and sub-contracting arrangements in Asia (Oduba, 2003).

Figure-1: Factors Affecting the Brain Drain



1. *Deteriorating economic conditions*: The economic conditions of most DCs in general and of sub-Saharan African countries in particular have been deteriorating over the last three decades. As a consequence, the ability of DCs to mobilize and allocate adequate resources to the various sectors of society as required (particularly to public service salaries) has been adversely affected. Many highly skilled personnel from DCs have gone to the West, in search of better pay and better conditions of service (Nolen, 2002; Gedamu, 2002; Reynolds, 2002; Slawon, 1998; Ngunjiri, 2001). According to Slawon (1998), many of the highly skilled personnel living and working overseas would actually like to return to their countries, but many factors militate against their possible return. The professionals in question feel that the salaries that they earn abroad simply cannot be matched by those they would earn locally. A scrutiny of public sector pay structures in most DCs reveals that State employees earn well below their counterparts in the private sector as well as in the NGO community, unlike in the developed and high-growth Asian countries (Tessema and Soeters, 2006). Over the years, the decline in public sector wages in DCs has been sharp and troubling. Thus, the question that stands out is: How can public institutions retain professionals, researchers, and scientists, in the face of such sharp declines in average real wages? One of the major causes of the brain drain is unreasonably low wages paid to professionals in the DCs. Docquier et al. (2007: 3) argue that:

“The migration pressure has increased over the last years and is expected to intensify in the coming decades, given the rising gap in wages and the deferring demographic futures in developed and developing countries.”

2. *Lack of peace and stability*: More than half of the world’s conflicts have taken place and continue to take place in Africa. In 1991, one out of every three countries on the continent was involved in a conflict of some kind. Today, there are more refugees in Africa than in any other region in the world (Prah, 2004; Johnson, 2000). This lack of peace and stability has, in turn, aggravated the problem of the brain drain (e.g., Clemens and Pettersson, 2007; Fadayomi, 1996; Ngunjiri, 2001; Prah, 2004; Teffera, 1997). The post-WWII political history of many DCs is marked by conflict and frequent military coups. This is particularly true of the newly independent nations. In sub-Saharan Africa, forty-three countries got their independence between 1956 and 1983. However, most of them experienced political turmoil of some kind, during the same period. No fewer than fifty governments in twenty-eight countries were overthrown by the year 1983 (David Lamb, cited in Austin, 1990: 57). Instability is typical of authoritarian rule; the latter lacks democratic responsibility and pressure. DCs in general and SSA countries in particular are characterized by low predictability of events, volatile and unstable political environments and corrupt legal practices (Chapal and Daloz, 1999; Docquier &

Marfouk, 2006; Kiggundu, 1989; Prah, 2004; Soeters, 2005). Religious and ethnic conflicts are also contributors to political instability. Political instability has tended to undermine the ability of civil service organizations to attract and retain qualified civil servants. According to Johnson (2000), migration takes place in response to wars and political and social turmoil. Political instability, thus, increases the rate at which professionals immigrate to the developed nations. Peace and stability are vital to attracting and retaining professionals.

3. *Lack of good governance*: It has been recognized that the absence of good *governance*⁶ contributes to brain drain in DCs (Physicians for Human Rights, 2004; Gedamu, 2002; Mutume, 2003). According to the World Bank, the UNDP and other bilateral donors (Das, 1998), governance in most DCs has been assessed to be less effective than it should be. Many DCs have been, until recently, characterized by single-party, military or one-man-rule states (Heady, 1996; Chapal and Daloz, 1999). In some instances, political groups seek to consolidate their stay in power by coercive means. According to Hojnacki (1996: 158):

“civil service systems in developing societies are vulnerable to politicization. In some cases, this politicization is viewed as a necessary step toward speeding up the process of economic development... In other cases, it can be seen as nothing more than simply a way for a political regime to extend its power and authority”.

Similarly, Heady’s (1996: 217) analysis of political administration in developing countries, concluded that:

“in single or dominant party political systems, party claims to a monopoly on policy making and executive make it imperative that civil servants pass whatever test of party loyalty may be imposed and that they suffer not only loss of status or position for falling short, but suffer in other ways as well, including imprisonment, banishment to the countryside, or death... in such circumstance, the behavior of civil servants who want to remain in the civil service is overwhelmingly determined by what is required of them by the current party line as to their roles”.

Heady’s observation has great relevance to the actual situations in many DCs and particularly that of SSA (including Eritrea) where the *administrative crisis* is most critical and the enforcement of personnel rules and procedures has simply broken down (Chapal and Daloz, 1999; Prah, 2004). Poor governance in many DCs has led to the failure of the rational, hierarchical and meritocratic model (Chapal and Daloz, 1999).

Oduba (2003) has noted too, that the violation of the principles of merit-based, competitive recruitment and promotion has reinforced political corruption, low respect for professionals, human right abuses and undemocratic governance, thereby leading to

⁶ Governance, in our context, refers to the rule of law, a fair and efficient system of justice, respect of human right, and accountability and transparency in the management of public affairs. Good governance is therefore responsive governance (Wade, 2000; Grindle, 1997).

the “brain drain” in DCs. In line with this argument, Selassie (2002) has asserted that many African governments still continue to prosecute their political opponents who often tend to be *educated*, for their political views and beliefs. Reasonable security for peoples’ lives and property is, thus, lacking in many DCs (Das 1998). As a consequence, many highly qualified personnel who are in the West lose confidence in their governments and future prospects for a better life in their home country. Many African governments continue to flout many of the internationally observed laws and human rights agreements; this actually makes them the biggest contributors to the brain drain (Selassie, 2002). Thus, poor governance in DCs is also partly to blame for human capital flight.

This literature review suggests that the causes of the brain drain are complex and interrelated, involving economic, political and social factors. Nevertheless, a number of studies single out deteriorating economic conditions, the absence of good governance and the lack of peace and instability as the major causes of brain drain in DCs. The effects of the three factors on brain drain may vary from country to country, though.

RESEARCH METHODOLOGY

This article contains quantitative and qualitative data collected through surveys (questionnaires), interviews as well as the analysis of relevant reports. In the survey, a multi-stage sampling procedure was used: first, ten⁷ out of seventeen government ministries were randomly selected and included in the sample. Thereafter, forty civil servants from each of the ten government ministry were randomly selected. In order to create a representative sample, the respondents were equally drawn from the following five services (5*8): administrative service, professional and scientific service, sub-professional service, clerical and fiscal service, and crafts and manual service. All in all, 400 questionnaires were distributed (10*5*8), of which 313 usable questionnaires were returned, leading to a response rate of 78 percent. 23 percent of the respondents were from the administrative service, 24 percent were from the professional and scientific service, 25 percent were from the sub-professional service, 16 percent were from the clerical and fiscal service, and the remaining 12 percent were from the crafts and manual service. The non-response rate was somewhat higher in the clerical/fiscal as well as in crafts and manual services. The questionnaires were developed in the English language and were subsequently translated into the local language.

The questionnaires contained 4 variables, which included the following items: *economic conditions* with 5 items, *governance* with 5 items, peace and stability with one item and “*brain drain*” with one item (see Table 1 for variable explanation). The equation therefore consists of the aforementioned three factors as predictor variables and the brain drain as the dependent variable. The respondents were asked to indicate the degree to which they agreed or disagreed with the items related to the above issues. All the items were measured on a five-point scale ranging from 1, “strongly disagree,” to 5, “strongly agree” (see Table 1 for their explanation and scale reliability). The analysis

⁷ The ten sample ministries of this study are: Agriculture, Education, Finance, Fishery, Health, Justice, Labour, Land, Local Government, and Trade and Industry.

also included 3 “control variables”, namely tenure, age, and sex. Except for the variables “tenure” and “age”, which are simply entered in the equation as continuous variables, “gender” was measured as a dummy variable.

In addition to the questionnaire, in-depth interviews were conducted with 72 public servants: ten HR managers, ten HRD managers, the Eritrean Civil Service Commissioner, the Director General of the Eritrean HRD Project, and fifty ordinary civil servants. Prior to the interviews we identified relevant concepts from the literature to be used as signposts. The interviewees responded in the local language to facilitate communication. Their responses were transcribed into English on the same day the interviews were conducted, while the observations and information were fresh in our minds. The transcribed interviews were read and the essential issues reported were annotated;

FINDINGS

Appearing here below are the results of the questionnaires and the interviews.

Table 1: Descriptive statistics and cronbach's alphas

<i>Variable in model</i>	High value means	<i>Alpha</i>	<i>Mea n</i>	<i>Min</i>	<i>Maxi .</i>	<i>s.d.</i>
Economic condition	Strongly agree that conducive economic condition exists in Eritrea	(.82)	2.5	1	4	.82
Governance	Strongly agree that good governance exists in Eritrea	(.71)	2.7	1	4	.70
Peace and stability	Strongly agree that peace and stability exists in Eritrea		2.4	1	4	1.2
Brain drain	Strongly agree that low rate of brain drain exists		2.4	1	5	1.1
Gender ^a	M/F					.50
Tenure	Years of work experience		17.2	1	43	9.50
Age	Age of the respondent		38	19	67	.96

Note: ^a33% were female.

As Table 1 indicates, the overwhelming majority of the variables were rated fairly low (mean values ranging between 2.4 and 2.7 on a 5-point scale). This is significant in analyzing the factors that have triggered off the “brain drain,” as will be discussed later.

Table 1 also presents Cronbach’s alphas which are used to check the reliability of the variables. All the Cronbach alphas range from .71 to .82, which can be considered satisfactory (Nunnally, 1979). We also performed ANOVA tests to find out if there were any differences in perceptions among the ten ministries in the sample. The tests demonstrated that the perceptions of the respondents were statistically insignificant among the ten sampled ministries. That was mainly due to the fact that the ten ministries were part and parcel of the Eritrean Civil Service which operated under fairly similar conditions.

Table 2: Correlation matrix

N	Variables	1	2	3	4	5	6	7
1	Gender							
2	Tenure	-.04						
3	Age	-.26**	.71*					
4	Economic condition	.04	-.11	-.11				
5	Governance	.14*	-.03	-.07	.63*			
6	Peace and stability	.03	.02	.02	.46*	.45*		
7	Low brain drain	.07	.00	-.02	.82*	.68*	.56*	

Notes: ** Correlation is significant at the 0.01 level; and *correlation is significant at the 0.05 level (2-tailed); n=313.

Table 2 presents the correlations between the variables included in the analysis. There are a number of item correlations; hence, potential multi-collinearity had to be considered. We computed variance inflation factors (VIFs), which indicated that multicollinearity was not a problem for the variables in the regressions whose results appear in Table 3.

Table 3: Results of regression analyses on "brain drain" ^A

<i>Variables</i>	<i>Model 1</i>	<i>Model 2</i>
Economic condition	.56***	.57***
Governance	.25***	.24***
Peace and stability	.19***	.19***
Gender		.03
Tenure		.08
Age		.00
F	252.5***	128.8***
R	.84	.85
R ²	.71	.72
R ² change		.01

Notes: ^a *Standardized Regression Coefficients are reported*; *** $p < .001$; $n = 313$

We performed a regression analysis in order to test the impact of the three factors (economic condition, governance, and peace and stability) on the brain drain, taking into account the perceptions of Eritrean civil servants. The three factors stated above were found to show a statistically significant positive impact in explaining changes in the brain drain and were greater than or equal to $\beta = .19$ (see Table 3). In addition, the three factors together explain about 71 percent change in brain drain ($R^2 = .71$). In model 2 in table 3, when gender, tenure and age were added, the R^2 change that we found was only .01, which was not statistically significant. The result suggests that these three controllable variables (gender, tenure and age) did not significantly affect the brain drain. This further implied that economic conditions, governance, and peace and stability were the main causes of the brain drain. By and large, our findings were in line with our predicted relationships. What this suggests is that the more the three factors are favorable or conducive, the less will be the brain drain and vice versa.

As stated earlier, we conducted in-depth interviews with 72 public servants who held either managerial or non-managerial positions. They interviewees were asked to rank the three causes of the brain drain in the Eritrean context. About fifty percent (47%) of those interviewed believed that the deteriorating Eritrean economic situation was the major factor that explained why the number of professionals who left the country increased over the last few years. Indeed, the Eritrean economy has been deteriorating rapidly due to the border war with Ethiopia (1998-2000). This, in turn, has adversely affected the public service salary structure. According to one interviewee, "in Eritrea at present, you cannot help yourself, nor can you help your parents (who expect a lot of

things from you), because public servants with MA degrees earn less than \$100 a month.”

Eritrea’s inflation rate shows an average annual increase of 13.5 percent. The situation looks severe when one considers the cumulative rate, which reached + 81.22 percent during the period 1997– 2002. While the inflation rate in the nation shows a cumulative rise of 81.22 percent from 1997–mid 2002 (National Statistics and Evaluation Office, 2002), public service salaries have been at a stand still. According to the U.S. Department of State (2008), the average inflation rate in Eritrea was 25 percent during the period in question. The current public service salary was introduced in 1996 and was competitive at that time. However, it has not been adjusted upwards to the present despite the high inflation rate obtaining in the country. As a consequence, the civil service has been severely affected by the decline in the purchasing power of the local currency (Amanuel and Tesfagiorgis, 2002: 4). It is not surprising, therefore, that the majority of the professionals are not satisfied with the existing economic condition and are ready to leave the country whenever an opportunity presents itself. As one medical doctor revealed, “we are paid so little that all of us in the medical profession think about going overseas. We want to be paid enough to support our families”.

Almost all the civil service managers who were interviewed lamented that, as a result of the poor performance of the Eritrean economy (see also UNDP, 2002; National Statistics Office, 2002), they were unable to offer attractive and competitive salaries for professionals. This demonstrates that in a period of budget constraints, the ability to pay has become the key criterion in pay determination, overshadowing any broader conceptions of *comparability*. For instance, as of 2002, employees of international NGOs and the private sector were earning salaries about three times higher than those of civil servants. There is, indeed, a wide gap in the incomes of workers in the public sector, on one hand, and those of their counterparts in international NGOs and the private sector, on the other hand. This situation has made it increasingly difficult for the Eritrean civil service agencies to attract, motivate and retain qualified personnel. As a consequence, civil servants tend, once they have obtained better qualifications through training, to move over to the private sector or the International NGOs or simply migrate overseas. This practice is rampant in numerous DCs (e.g., Das, 1998; Cohen and Wheeler, 1997; Aredo, 2002; World Bank, 1994; Grindle, 1997).

About a third (29%) of the interviewees also believed that *lack of good governance* is among the main causes of the departure of skilled professionals for greener pastures. This is because, after the border war with Ethiopia broke out in 1998, the government shifted its priority to national defense, thereby neglecting several governance-related issues. The afore-mentioned governance issues, such as the rule of law, a fair and efficient justice system, respect for human rights, and accountability and transparency in the management of the public affairs were severely neglected (Dorman, 2003). Amnesty International, Reporters Without Borders, Human Rights Watch, the European parliament, the United States of America, and many other organizations and countries published reports highlighting severe human rights violations in Eritrea during the period in question.

The Eritrean civil service has been politicized to a certain degree. There is no clear separation between administration and politics (Tessema and Soeters, 2006). Politicization has resulted in the erosion of traditional civil service values such as political neutrality, probity, rectitude, and objectivity. The politicization of the civil service has also adversely affected HR management practices which are vital for attracting, motivating and retaining skilled professionals. This state of affairs is a serious cause of dissatisfaction among Eritrean professionals.

According to the survey, furthermore, about a quarter (24%) of the interviewees believed that *lack of peace and stability* fueled the brain drain. The Eritrean case shows that the years between 1991 (year of independence) and 1998 were times when the people enjoyed peace, social stability and relatively sound economic progress that have only left them nostalgic. It was a time when the government was slowly but steadily consolidating itself while at the same time reconstructing the physical, economic, social and institutional infrastructure. Unfortunately, Eritrea's promising growth, peace and stability were disrupted by the border conflict with Ethiopia which subsequently escalated into a full-scale, costing more than 70,000 of lives from both countries (Mehreteab, 2002). Although in December 2000, the two countries signed a peace agreement mediated by the OAU and the UN, the situation has been one of 'no war - no peace'. This kind of situation has only aggravated the rate of the brain drain in Eritrea (see Table 4).

The results of the interviews and those of questionnaires were more or less similar; they both pointed to the fact that the deteriorating economic situation, the lack of good governance and the lack of peace and stability are the main causes of the brain drain in the Eritrean context.

The above findings were supported by the statistical data of the sample ministries; according to the statistical data, from 1991 to 1998, there was almost no brain drain among the public servants who were sent abroad for short or long-term training. The brain drain kicked in only from 1998 (see Table 4).

Table 4: Status of the 410 staff of the Ministry of Health and Education trained overseas (1993-2002)

Education	Status	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	Total
	Returned	16	32	32	26	53	41	29	8	33	22	292
	Absconded					1	1	3	3	4	7	19
	Total	16	32	32	26	54	42	32	11	37	29	311

Health	Returned	5	6	2	10	4	8	17	11	9	17	89
	Absconded						1	2	2	2	3	10
	Total	5	6	2	10	4	9	19	11	11	20	99

Source: survey data from the Ministry of Health and Education, 2003.

Table 4 illustrates the trend of the “brain drain”. Out of the 99 medical professionals who underwent *long-term training* from 1993-2002 overseas, 10 absconded. And 19 of the 311 staff members of the Ministry of Education who underwent overseas training from 1993-2002 disappeared after completing their studies or simply abandoned their studies and disappeared into the western world. A closer look at Table 4 also indicates that about 96 percent of the 29 staff members of the two ministries mentioned above, who were sent overseas for training (1993-2002), did not return home during the period 1998-2002. This suggests that the brain drain increased from 1998 forward. It must be noted also that the above figures did not include the staff of the two ministries who were sent for short-term training (conferences and workshops) and did not return, as well as those who went to the West on their own accord, in search of better lives, or for political reasons.

Before the border war erupted in 1998, the brain drain was the reverse (i.e., brain gain) in that during that time, many highly skilled Eritreans, who used to live in the developed world for a long time, began to return home to work in the public service or in the private sector or as consultants. For example, Tseggai (1998: 232) records that “about 28 percent of the organizations surveyed were able to recruit skilled employees among Eritreans in the diaspora, mostly from Ethiopia, with some success”. However, after the war broke out, most of the Eritreans who were abroad left their country again (especially that many of them had dual citizenship).

And concerning the 674 EHRD project trainees (of whom 64 percent absconded), the rate of the brain drain increased. That was because the 1998 border conflict led to: the deterioration of the national economy, political instability, and in governance practices in Eritrea. Ghebrehiwet (2005) explains that, due to the deteriorating economic and political situations, tens of thousands of young Eritreans (many of them well educated) left the country over the years. As a consequence, since 2003, the government stopped granting permission to Eritreans to study overseas, regardless of their sources of funding.

Next, concerning the question, “What impact did the brain drain have on Eritrea’s economic and social development?”, our survey results showed that, about 58 percent of the interviewees believed that the brain drain had a positive impact on the economy. Some of the reasons given were that: [1] the immigrants’ remittances played a vital role in supporting Eritrean families as well as made foreign currency available in the economy. As Fessehatsion (2005) notes, over the first ten-years of Eritrea’s independence, remittances back home averaged US\$226 million per year in current

prices. When combined with Official Development Assistance (ODA), remittances provided two thirds of Eritrea's Gross Domestic Product (GDP) for the years 1995-2002; [2] the monthly contributions of the two percent of incomes of Eritreans working abroad to the government⁸ -“diaspora tax”-, popularly known as “2% tax” and other periodic contributions under various causes - famine, Eritrean Defense Force, orphans, martyrs' families, etc., make a difference at home; [3] the transfer of skills and technologies to Eritrea; and [4] the venture capital that Eritreans working abroad bring makes a difference at home. On the other hand, about 33 percent of the interviewees believed that the brain drain had negative consequences in that it had created a skills gap in some areas (e.g., medical doctors, University professors and policy analysts). The interviewees added that the brain drain had also adversely affected the morale and performance of the professionals at home.

Eritrea is a particularly interesting case in the sense that its nationals who reside overseas make significant contributions to the national economy. Eritrea has a large diaspora that has historically made considerable contributions to the struggle for independence and benefited from global connectivity. In fact most of the interviewees were of the opinion that the reconstruction of Eritrea after independence has been helped rather than hindered by the large pool of nationals in the diaspora who possess superior skills by virtue of their stay out of the country.

DISCUSSION AND IMPLICATIONS

The three factors that have been tested empirically – economic conditions, governance, and political stability- are instrumental either in accelerating or decelerating the brain drain in DCs. In the Eritrean case, however, the three factors are found to be uncondusive to decelerating the brain drain, particularly after the year 1998. As a consequence, the three factors were rated fairly low by the respondents (between 2.4 and 2.7 on a 5-point scale).

Decades of declining real incomes, deplorable working conditions, political interference, and poor management have created cadres of public servants in many DCs who are chronically demoralized and de-motivated. The public sector, on the one hand, is increasingly unable to retain the trained personnel wherever other employment opportunities exist. On the other hand, it poorly utilizes the expertise of those public servants who do not leave⁹. A low salary level has been significant in undermining the

⁸ Eritreans residing overseas had been playing a vital role during the thirty-year war for liberation. After 1993, they have also been contributing two percent of their incomes (Fessehatsion, 2005). Nevertheless, since 2001 their willingness of contributing the two percent of their incomes has substantially decreased due to the government's refusal to put the constitution into effect, which in turn has led to human right violation in the country.

⁹ As one interviewee remarked, the bigger tragedy of countries like Eritrea is not the “brain drain” but its brain hemorrhage. He also added that the professional bleeding in country like Eritrea is so acute, some of the brains, do not do what they are supposed to do mainly due to lack of proper management, political interference, lack of facilities and budget.

previously existing capacity in many DCs (Hilderbrand and Grindle, 1997: 42; Cohen and Wheeler, 1997: 137). This is mainly due to the fact that when individuals get additional training (education), they develop higher expectations which public organizations in DCs do not usually fulfill. Thus, one can contend that instead of training to have a positive impact on the morale and performance of trained public servants, it could have a negative impact (triggering brain drain), if the above three factors are not favorable (see also Schaffer, 1974; Tessema et al., 2005). This suggests that more than anything else, it is the personnel crisis in the public sector in DCs that has to be addressed if meaningful improvements in service delivery are to be realized.

The Eritrean case shows that, although many scholars and government leaders like Bill Clinton cited it as a beacon of Africa after seven years of economic growth and political stability, the country's border war with Ethiopia adversely affected its economy and political stability. The latter, in particular, diverted the government's attention to national defense. For example, following the government mobilized about 300,000 Eritreans to go and fight in the war; this figure represents about 10 per cent of the entire population, or more than 50 percent of the population of working age (Mehreteab, 2002).

One may group the main causes of the brain drain under two broad categories: the 'push' and the 'pull' factors. In the context of the LDCs, the three factors discussed above (economic, governance as well as stability) constitute the 'push factors'. Conversely, the same three factors, in the context of the developed world, constitute the 'pull factors'. http://www.eric.ed.gov/ERICWebPortal/Home.portal?_nfpb=true&_pageLabel=ERICSearchResult&_urlType=action&newSearch=true&ERICExtSearch_SearchType_0=au&ERICExtSearch_SearchValue_0=%22Bertram+Carol%22 Bertram et al. (2007) and Oduba (2003) underline that developed countries are very determined to attract highly skilled migrants to their economies through relaxation of visa regulations for skilled persons and active overseas recruitment. In the global market, professionals are seeking out the highest bidders, hitting the nations that need them hardest.

The migration of the highly skilled may also reflect the fact that well educated individuals from DCs prefer to work in rich countries, and that rich countries give them the opportunity to do so. Or, they think that the three factors being analyzed are conducive in the West. As one manager remarked, it is a paradox of today's world that DCs like Eritrea that have the greatest need to use professionals are not using them effectively and in fact are losing many of their best educated young men and women to the developed societies.

The prevailing economic and political context within which professionals live and work in many DCs like Eritrea has therefore aggravated the rate of the brain drain. In addition to the search for greater economic opportunity, political instability is a major reason for people who leave their home countries (Johnson, 2000; Kiggundu, 1989; Aredo, 2002). One may argue that in an environment where there are no promising economic and political conditions (peace and stability as well as good governance), the brain drain

tends to increase. An interviewed Eritrean professional noted that the challenges of establishing conducive economic and political conditions to retain and re-attract skilled personnel are daunting. While some DCs are beginning to recover, others are engulfed in recent crises.”¹⁰

IMPLICATIONS OF THE STUDY

This study has important policy implications. If governments of DCs are to take advantage of the brain drain or to turn the brain drain into the brain gain (for those who are residing overseas) on the one hand, and to reduce the brain drain to its lowest level on the other, they need to take some measures. We are well aware of the fact that the causes of the brain drain are complex and interrelated, involving economic, political and social factors. Thus, the necessary responses should be varied and cover an array of areas. This suggests that there is a need to know what action/policy works for whom and in what circumstances. The following are the two most important implications of the study:

First, governments of DCs need to make their respective countries more attractive to their citizens politically, economically and socially, if the brain drain is to be minimized. While economic factors dictate that DCs cannot yet afford to pay Western-size wages, they can ensure that the respect for basic human rights and law prevails over all (Selassie, 2002; Fadayomi, 1996). This, in turn, could help DCs to attract, retain and motivate their professionals. This may not only help in retaining national experts but it is likely to engender confidence in all the citizens to give their best in the quest for national development.

Secondly, DCs need to recognize the positive side of the brain drain as well. This is because immigration of highly skilled personnel can also play an important role in promoting the economic development of sending countries in at least three ways: sending dollar remittances, transferring knowledge and technology, and investing in country of origin (bring venture capital) (for details see Straubhaar and Vadean, 2005; Gubert, 2005; Meyer and Brown, 1999). In this regard, DCs should make efforts to create conducive environments that enable them to take advantage of their emigrated professionals. For instance, the “scientific diaspora” and the “immigrant entrepreneur networks” can help DCs to capture the benefits associated with overseas employment. Grassroots initiatives in South Africa and Latin America have been developed to link researchers abroad to networks in their home countries. Indian professionals in the US have been the primary drivers of knowledge and capital flows to India¹¹. With the right mix of policies and sustained international co-operation, several countries could, as one interviewed civil manager pointed out, see the “brain drain” be transformed into a “brain

¹⁰ Among others are Liberia, Cote d’Ivoire, Zimbabwe, Sudan, and Eritrea.

¹¹ Countries such as India that have historically held strong anti-brain-drain views are now adopting different approaches that seek to encourage global mobility and tap into it; rather than curtail it.

bank". This, however, does not mean that all DCs need to encourage the highly skilled workforce to migrate to the West.

CONCLUSIONS AND FUTURE RESEARCH DIRECTIONS

This article concludes that brain drain is a multifaceted and complicated issue, involving economic, political and social factors. Deteriorating economic conditions, lack of good governance, and the absence of peace and stability are the major causes of the brain drain in the Eritrean context. However, the impact of these factors may differ from country to country if applied elsewhere. The Eritrean case reveals that economic conditions, governance, and peace and stability affect both the brain drain and the brain gain in that the more these factors are uncondusive, the more the brain drain (the less the brain gain) would be. Conversely, the more they are conducive, the less the brain drain (the higher the brain gain) would be. For instance, between 1993 and 1998, the three factors were getting better and better, which in turn minimized the brain drain. After 1998, however, they began to take a turn for the worse, which in turn began to aggravate the brain drain. The article also concludes that, although all organizations in DCs like Eritrea have been adversely affected by the brain drain, it is the public sector which is the hardest hit mainly because of its inability to effectively attract, motivate and retain qualified public servants.

On a different note, this study extends past research (in brain drain) by providing a qualitative and quantitative assessment of the much-debated brain drain. The study adds to the literature on the brain drain in that, unlike most prior research, it empirically tested the impact of three factors on brain drain in DCs taking Eritrea as a case study. In this regard, the key contributions of the present research is its attempt to answer 'how, when and to what extent' the three factors - economic conditions, governance, and peace and stability - affect the brain drain in Eritrean environment. Hence, our study has important implications for the theoretical and practical debate on brain drain. Nevertheless, additional research is needed to examine the robustness of the findings and generalizations.

The conventional mode of thinking ignores the growing realization that we live in a world marked by international mobility and "brain circulation"¹²¹⁶¹. The notion of the brain drain is based on a mechanistic view that assumes that knowledge is a fixed resource that is embedded in individuals and therefore when they leave, their community automatically loses. This outdated outlook ignores the fact that we live in a world where the main currency of change is knowledge, which is now moved across international borders more easily. This article illustrates that Eritrea, with its large diaspora, has benefited a lot from its nationals residing abroad - both during the

¹² Recently, Johnson and Regets (1998) have introduced a new concept into the debate, namely 'brain circulation'. This refers to the cycle of moving abroad to study, then taking a job abroad, and later returning home to take advantage of a good opportunity. The authors believe this form of migration will increase in the future, especially if economic disparities between countries continue to diminish. Such circular migration has been observed amongst Malaysians who had studied in Australia, for example.

liberation struggle and during the nation- and state-building stages. However, when the Eritrean government refused to implement the new constitution, which in turn led to human right violations and arbitrary arrests, the contributions of the Eritrean diaspora (e.g., 2 percent of their incomes, investment, volunteering, remittances, etc.) diminished. This may suggest that unless there is an accountable, transparent, and responsible government that creates a conducive environment, migrant professionals would not be willing to participate in nation- and state-building of their respective countries.

While this study is an important step forward in understanding the cause and challenges of the brain drain in DCs in general and that of the public sector in particular, it also leaves some questions open for future research. The study was mainly based on the perceptions of the public servants who were in Eritrea. Future research, however, could be directed at examining the perceptions of the public servants who have already migrated to the West. Second, the study is the first one of its kind; as such, greater caution should be taken in any attempts to generalize its findings. In fact additional research should be conducted in other African countries before generalization can be attempted.

Mussie T. Tessema, Ph.D, Assistant Professor of HR Management, Department of Business Administration, Winona State University, Somsen Hall, 55987, MN. USA: mtessema@winona.edu.

Alex M. Ng'oma, Ph.D. Researcher, Department of Public Administration, University of South Illinois, IL, USA: amngoma1232000@yahoo.com.

REFERENCES

- Adams, W. (1968). *The Brain Drain*. New York: Macmillan.
- Amanuel, G. & Tesfagabir, Z. (2002). *A report on labor market issues and remuneration schemes*. (Central Personnel Agency). Asmara, Eritrea.
- Aredo, D. (2002). *Brain drain reportedly costing \$4 billion a year*. Addis Ababa: UN Integrated Regional Information Networks.
- Austin, J. (1990). *Managing in developing countries: Strategic Analysis and Operating Techniques*. New York: The Free Press.
- Bertram, C., Wedekind, V., & Muthukrishna, N. (2007). Newly qualified South African teachers: Staying or leaving? *Perspectives in Education*, 25(2), 77-89.
- Carrington, W. J. & Detragiache, E. (1999). How extensive is the brain drain? *Finance and Development*, 36(2): 46-49.
- Central Personnel Administration (CPA). (2002). *Civil service functional reviews report (CPA)*. Asmara, Eritrea.
- Chabal, P. & Daloz, J. -P. (1999). *African works: Disorder as political instrument*. Oxford: James Currey for the International African Institute.

-
- Clemens, M. A. and Pettersson, G. (2007). New data on African health professionals abroad. *Center Global Development*. Working Paper Number 95.
- Cohen, J. M. & Wheeler, J. R. (1997). Training and retention in African public sectors: Capacity-building lessons from Kenya. In M. S. Grindle (Ed.), *Getting good government: Capacity building in the public sector of developing countries* (pp. 125-153). Cambridge, MA: Harvard University Press.
- Das, S. K. (1998). *Civil service reform and structural adjustment*. New York: Oxford University Press.
- Docquier F., Lohest, O. and Marfouk, A. (2007, forthcoming). Brain Drain in Developing Countries. *World Bank Economic Review*.
- Docquier, F., Lowell, B.L., Marfouk, A. (2007). *A Gendered Assessment of the Brain Drain*
Discussion Paper No. 3235
- Docquier, F. & Marfouk, A. (2006). International migration by education attainment, 1990-2000. In C. Ozden & M. Schiff (Eds.), *International migration, brain drain and remittances*. (pp. pp, 151-199) New York: McMillan and Palgrave.
- Docquier, F. and Rapoport, H. (2004). *Skilled migration: the perspective of developing countries*. Policy Research Working paper, 3382, World Bank: Washington DC.
- Dorman, S. R. (2003, April). *Eritrea's nation and state building: Re-assessing the impact of the struggle*. Paper presented at the Conference on Globalization and Self-Determination. London.
- Dowling, P. J. & Welch, D. E. (2004). *International human resource management* (4th ed.). London: Thomson.
- Eritrean Human Resources Development Project (EHRDP). (2003). *Terminal report and exit strategy*. Asmara, Eritrea.
- Fadayomi, T.O. (1996). Brain drain and brain gain in Africa: Causes, dimensions, and consequences. In A. Adepoju and T. Hammer (eds.), *International migration in and from Africa: Dimensions, Challenges, and prospects*. Stockholm: Population, Human Resources and Development in Africa, Centrum for invandringsforskning.
- Fessehatsion, T. (2005). Eritrea's Remittance-Based Economy. *Eritrean Studies Review*, 5(1), 165-183.
- Gedamu, A. (2002). Causes and consequences of brain drain - How long should Africa to tolerate this? Retrieved December 28, 2007 from <http://chora.virtualave.net/brain-drain7.htm>.
- Ghebregiorgis, F. & Karsten, L. (2007). Employee reactions to human resource management and performance in a developing country: Evidence from Eritrea. *Personnel Review*, 36(5), 722-738.
- Grindle, M. S. (1997). The good governance imperative: Human resources, organisations, and institutions. In M. S. Grindle (Ed.), *Getting good government: Capacity building in the public sector of developing countries* (pp.3-28). Cambridge, MA: Harvard University Press.

-
- Government of Eritrea. (2004). *Unpublished Document*, Asmara, Eritrea.
- Gubert, F. (2005). Migrant remittances and their impact on development in the home economies, the case of Africa. In OECD, *Migration, Remittances and Development*. Paris: OECD.
- Heady, F. (1996). Configurations of civil service systems. In H. Bekke, J. Perry, and T. Toonen (Eds.), *Civil service systems in comparative perspective* (pp. 207-226). Bloomington: Indiana University Press.
- Hilderbrand, M. E. & Grindle, M. S. (1997). Building sustainable capacity in the public sector: What can be done? In M. S. Grindle (Ed.), *Getting good government: Capacity building in the public sector of developing countries* (pp. 31-61). Cambridge, MA: Harvard University Press.
- Hojnacki, W. (1996). Politicisation as a Civil service Dilemma. In H. Bekke, J. Perry, and T. Toonen (eds.), *Civil Service Systems in Comparative Perspective* (pp. pp. 207-226). Bloomington and Indianapolis: Indiana University Press.
- Ingraham, P, and Kneedler, A. (2000). "Dissecting the Black Box: Toward a Model and Measures of Government Management Performance." In J, Brudney, L. O'toole, and H. Rainey (eds.), *Advancing Public Management: New Developments in theory, methods, and practice*. Washington, D.C: Georgetown University Press.
- Johnson, D. (2000). *Africa's brain drain slows development*. Pan-African News Agency, United Nations Economic Commission for Africa. Retrieved December 27, 2007 from http://africana.com/articles/daily/index_20000302.asp.
- Johnson, J. & Regets, M. (1998). International Mobility of scientists and engineers to the US- Brain drain or brain circulation? *NSF Issue Brief*, 98-316.
- Kiggundu, M. N. (1989). *Managing organizations in developing countries: An operational and strategic approach*. West Hartford, CT: Kumarian Press, Inc.
- Marfouk, A. (2008). *The African Brain Drain: Scope and Determinants*. Retrieved September 10 from <http://ideas.repec.org/p/dul/wpaper/08-07rs.html>.
- Mehreteab, M. (2002). *Veteran combatants do not fade away: A comparative study on two demobilization and reintegration exercises in Eritrea*. Bonn: BICC.
- Ministry of Education (MOE) [Eritrea]. (2003). *Annual Report*. Asmara: MOE.
- Mutume, G. (2003). Reversing Africa's 'brain drain'. *Africa Recovery, United Nations*, 17(2), 1-9.
- National Statistics and Evaluation Office. (2002). *Inflation rate in Eritrea*. Asmara, Eritrea.
- Ngunjiri, P. (2001). Africa continues to suffer from a brain drain. Retrieved December 27, 2007 from http://africana.com/articles/daily/index_20010801.asp.
- Nolen, S. (2002). Continent's educated can no longer run things: they are dead or cannot cope. Retrieved December 27, 2007 from <http://www.geocities.com/ericquired/articles/afr061902b.btm>.
- Nunnally, J. C. (1978). *Psychometric theory*. New York: McGraw-Hill.

-
- Oduba, V. (2003). Brain drain – technology ushers in brain drain. *Science in Africa: Africa's First On-Line Science Magazine*.
- Olesen, H. (2002). *Migration, return, and development: An institutional perspective*. *International Migration*, 40(5), 125 (Special Issue).
- Onyango-Obbo, C. (2005). *Join Africa's brain drain, or rot at home*. Retrieved December 29, 2007 from <http://allafrica.com/stories/200501040763.html>.
- Physicians for Human Rights. (2004). *An action plan to prevent brain drain: Building equitable health systems in Africa*. Boston, MA: Physicians for Human Rights.
- Prah, K. K. (2004). African wars and ethnic conflicts - Rebuilding failed states. *Human Development Report 2004*. African Regional Background Paper, UNDP.
- Reynolds, R. R. (2002). An African brain drain: Igbo decisions to immigrate to the US. *Review of African Political Economy*, 29, 273-284.
- Schaffer, B. (1974). *Administrative Training and Development: A Comparative Study of East Africa, Zambia and India*. New York: Praeger.
- Slawon, M. (1998). *The factors influencing non-return of African graduate students in the United States. The Study of Reverse Transfer of Human Capital*. Ed.D. Dissertation, North Carolina State University.
- Selassie, G. (2002). The brain drain-Africa's achilles heel. *World markets research centre*. In Focus 2002 Africa.
- Soeters, J. (2005). *Ethnic conflict and terrorism. Origins and dynamics of Civil Wars*. Abingdon: Routledge.
- Teffera, D. (1997). Brain drain of African scholars and the role of studying in the United States. *International Higher Education*, 7, 4-6.
- Tessema, M. & Soeters, J. (2006). Challenges and prospects of HRM in developing countries: Testing the HRM-performance-link: The case of Eritrea. *International Journal of Human Resource Management*. 17(1), 86-105.
- Tessema, M., Soeters, J. & Abraham, K. (2005). Practices and challenges of training and labour utilisation in Sub-Saharan Africa: The case of Eritrea. *International Journal of Training and Development*. 9(4), 214-231
- Tseggai, A. (1999). Human resource development: Priorities for policy. In M. Doornbos & A. Tesfai (Eds.), *Post-conflict Eritrea: Prospects for reconstruction and development*, Trenton (pp.215-238). Trenton, N.J.: Red Sea Press.
- United Nations Development Programs (UNDP). (2002). *United Nations development assistance framework for Eritrea: 2002-2006*. Asmara, Eritrea.
- University of Asmara (UOA). (1997). *Implementation plan of the Eritrean human resource development project*. Asmara, Eritrea.
- U.S. Department of State (2008). Background note: Eritrea. Retrieved August 27, 2008 from <http://www.state.gov/r/pa/ei/bgn/2854.htm>.
- Wadda, R. (2000, February). *Brain drain and capacity building in Africa: The Gambian experience*. Paper presented at regional conference on the brain drain and capacity building in Africa, Addis Ababa, Ethiopia.

World Bank. (1997). *World development report: The state in a changing world*. Oxford: Oxford University Press.

World Bank. (1994). *Adjustment in Africa: Reforms, results, and the road ahead*. New York: Oxford University Press.

ABOUT IPMR

IPMR	<p>The International Public Management Review (IPMR) is the electronic journal of the International Public Management Network (IPMN). All work published in IPMR is double blind reviewed according to standard academic journal procedures.</p> <p>The purpose of the International Public Management Review is to publish manuscripts reporting original, creative research in the field of public management. Theoretical, empirical and applied work including case studies of individual nations and governments, and comparative studies are given equal weight for publication consideration.</p>
IPMN	<p>The mission of the International Public Management Network is to provide a forum for sharing ideas, concepts and results of research and practice in the field of public management, and to stimulate critical thinking about alternative approaches to problem solving and decision making in the public sector.</p> <p>IPMN includes over 600 members representing sixty different countries and has a goal of expanding membership to include representatives from as many nations as possible. IPMN is a voluntary non-profit network and membership is free.</p>
Websites	<p>IPMR: http://www.ipmr.net/ (download of articles is free of charge)</p> <p>IPMN: http://www.inpuma.net/</p>
ISSN	ISSN 1662-1387