



Africa's Brain Drain

Its Impacts on Security and Stability

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AFRICA IS BLEEDING. Much of its lifeblood, composed of well-educated individuals who could help tackle its toughest problems, is flowing away. This hemorrhaging of engineers, doctors, teachers, nurses, businesspersons, scientists, and others with extensive training constitutes Africa's brain drain. In a continent where relatively few attend elementary school, let alone college, these individuals on whom society has often spent a disproportionate amount of its resources to educate are taking their precious skills elsewhere.

The impact has been enormous. Many hospitals and health centers cannot function because the African doctors and nurses have gone to Europe or America. Schools often lack qualified teachers. The list of projects and programs deferred because capable individuals are not available seems endless.

African militaries are not immune to the problem. From the upper echelons of the services where strategic decisions are made, to the lower echelons where technical equipment must be maintained, the lack of qualified individuals in many armies, navies, and air forces is being felt. Loss of educated individuals on the civilian side also affects military capabilities. Fewer businesspersons generate taxable revenue, fewer engineers design roads and other critical infrastructure, and perhaps most damning of all, fewer educated people are available to serve in government jobs and provide, among other functions, important civilian oversight of the armed services.

Despite the loss of educated citizens who could help build a better Africa, there are some benefits for the continent due to the brain drain. Most significant of these are the billions of dollars in remittances sent home

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PHOTO: Sister Maerine Achieng examines a child at a clinic in the Kibera slum in Nairobi, Kenya, 26 June 2006. (AP Photo/Khalil Sensoi)

every year to support not only families, but also the economies of entire countries. One must consider this cash flow when examining the impact the brain drain has on the stability of nations and, from a military perspective, the nations' ability to recruit, train, and sustain military personnel and purchase new weapons. This article will discuss both the benefits of the brain drain and its adverse impacts, and leave the final decision as to whether the brain drain is a benefit or loss for Africa to the reader.

Why the Brain Drain?

There are numerous reasons why well-educated individuals are leaving Africa. The overarching one appears to be the much higher income they can make in Europe and elsewhere compared to in their homelands. By international standards, salaries in many African countries are quite low, especially for professionals such as engineers, doctors, and nurses. They realize their economic worth is much greater outside the continent and are leaving in droves, enticed by the greater economic opportunities elsewhere.

To think all of these individuals selfish for leaving a continent that desperately needs their expertise for the chance to earn far greater salaries would be a mistake. Estimates are that many of these people send nearly 60 percent of their salaries back home so that relatives and others can purchase food, pay school dues, care for aging parents, buy medicines, establish income-generating projects, and support a myriad of other worthwhile causes that would go unfunded if individuals did not journey to foreign lands in search of higher incomes.

Commonly, African countries with smaller populations and limited opportunities for economic diversification have a disproportionate amount of migration compared to countries with larger populations.¹ The reason behind this appears to be the limited capability for economic diversification in a nation with a small population, especially if it has not entered into a regional economic alliance, such as the Economic Community of West African States.

It is not just the chance for a higher income that entices educated Africans to leave their homeland. In many African nations there are often no jobs for university graduates in their chosen major at

any salary. After years of studying engineering they may find themselves selling newspapers; after years of studying medicine, perhaps they are driving a taxi. With ready access to foreign media advertising the need for people with their skills, it's understandable why they often choose to leave. Upon arriving in new lands they often find that not only are their skills in demand, but also they have access to technologies their native countries could only dream of acquiring.

Wars, both internal and external to nations, and political persecution have also contributed to the brain drain. Repressive regimes sometimes target highly educated individuals because of their outspoken candor; it is safer to criticize a crazed dictator from the streets of London than from the streets of their homeland.

Extent of the Brain Drain

Poor record keeping, inconsistent use of definitions, and other factors make it difficult to gauge the exact extent of the brain drain, with many claiming that the official estimates are too low.² The World Bank calculates that in 2010 approximately 30.6 million Africans left their nations of origin. Most of these went to other African countries, although this pattern did not hold for all of Africa; 90 percent of North Africa's emigrants moved to nations outside the continent.³

The two most popular destinations for intra-continental migration are Cote d'Ivoire and South Africa, which receive, respectively, 8 percent and 6 percent of the intra-continental emigrants. France, the destination of choice for those leaving Africa, receives 9 percent of all emigrants. Saudi Arabia receives 5 percent. The United States and United Kingdom each receive 4 percent.⁴

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(U.S. Air Force, SGT Sean M. Worrell)

U.S. Army CPT Gwynne Kinley, a veterinarian with the 350th Civil Affairs Command, Pensacola, Florida, and a Kenyan veterinarian fill a syringe with a multivitamin for goats during a Veterinarian Civic Action Program operation at Pate Island, Kenya, 3 December 2006.

In 2004, 7.2 million Africans, 3.8 million from North Africa and 3.4 million from sub-Saharan Africa, were living in countries who were members of the Organization for Economic Cooperation and Development, a group of developed nations attempting to improve the economies of less developed countries. Some believe that one out of every eight Africans with a university degree is living in a nation that is a member of the Organization for Economic Cooperation and Development. This is ironic, given that the organization is supposed to be fostering development in less-developed countries.⁵

Impact on Military Resources

It costs \$40,000 to \$70,000 to train an air force pilot in Ghana, a sum that is a huge investment for a poor country.⁶ However, with an estimated 20 to 30 percent of these officers leaving the service

to fly elsewhere, training them is a chronic drain on scarce military resources.⁷ Moreover, it's not just the Ghana Air Force losing personnel. The country's military hospitals are losing doctors and nurses.⁸ Commanders report many other units from the military are suffering deleterious effects from the loss of well-trained individuals. Though Ghana has been particularly open with the press regarding the impact the brain drain has had on its military, many other African nations share the same fate.

Besides the readiness implications and the financial impact of losing trained soldiers, the brain drain impacts the African militaries in numerous other ways. Probably the most devastating loss is that of present and future leaders. With fewer experienced soldiers to command, teach, or provide foresight, the services must turn to less qualified individuals, with possibly less than optimal military outcomes being the result.

The more training a service member has, especially in technical fields, the more desirable and marketable he or she becomes to other countries. As the previous example has shown, pilots with their extended technical training are particularly susceptible to foreign recruiters, potentially leaving some African air forces in the position of having planes but no one to fly them.

With the loss of engineers and technicians, some African militaries will have difficulty modifying foreign-made military hardware to meet the needs of their own services. Equipment repairs will be deferred or undone. With the requirement that purchasers understand the technical specifications and capabilities of various weapons, even the acquisition of equipment will be impaired.

The loss of military medical personnel will also be acutely felt. These individuals are uniquely qualified to implement disease prevention programs as well as to treat the sick. Malaria, tuberculosis, and many other infectious diseases are endemic in parts of Africa, but through preventive measures and treatment, their impact on troops can often be mitigated.

HIV/AIDS presents a particular challenge to many African militaries because they are frequently composed of young men away from home for their first time, a high-risk group. As a result, African armed forces have an HIV/AIDS rate two to five times higher than the corresponding civilian populations.⁹ HIV/AIDS rates in some African militaries are high enough to affect military readiness. Units find they are undermanned and/or have to divert considerable resources to caring for sick soldiers. African nations with particularly high HIV/AIDS rates, such as South Africa and Nigeria, traditionally have contributed a significant number of troops to peacekeeping operations, a role in jeopardy. As one South African general stated regarding his country's armed forces HIV/AIDS prevalence rate of 23 percent, "From the military health perspective we are fighting a war, a human war."¹⁰ Unfortunately it takes troops to fight a war, troops such as doctors and nurses, the very type of people emigrating from Africa, leaving behind the South African, Nigerian, and other militaries to do battle against HIV/AIDS, tuberculosis, and other deadly diseases without medical personnel.

Flow of Ideas

There is a two-way flow of ideas between Africa and its citizens living abroad. The flow from Africa to its expatriate community is beyond the scope of this article, which will, instead, examine the flow of ideas in the other direction, from the expatriate community back to Africa.

This flow of information to Africa, facilitated in recent times by social media such as Facebook, can influence security and stability in African nations through casual conversations with family and friends, agitating for positive change, or by agitating for negative change.

Casual conversations. An informal survey by the author of web browser histories in African internet cafes supports the premise that the majority of information sent back to Africa has no impact on security and stability. Updates on work and health, talk of the food and weather, and other noncontroversial subjects likely fill many conversations with friends and relatives back home. It is noteworthy to mention the popular culture conversations on websites where expatriate Africans discuss the latest Western music, movies, dress, and sports with their friends and relatives back home who, based on their comments, appear eager to hear such news. Western culture has a profound influence on many Africans, as a trip to that continent will often reveal, and such influences can help forge strong ties between the West and Africa.



U.S. Navy LCDR Nate Grigham, second from right, a doctor with the 354th Civil Affairs Brigade, works with Ethiopian medical volunteers to find the correct diagnosis for a patient during a medical civic affairs project in Belewa Village, Ethiopia, 4 October 2008. (USAF, SSgt Samuel Rogers)

Agitating for positive change. The category “agitation for positive change” includes conversations related to the benefits of democracy, a free press, the protection of human and property rights, and religious tolerance. Africans living abroad might report back to their homelands the benefits of such principles and practices. They also might establish groups that encourage the national governments of their adopted homelands, such as Britain and France, as well as international organizations, such as the United Nations, to push African governments toward better governance. The web is full of sites, created by the African diaspora, reflecting this interest. This author has noticed in particular three nations as having a large number of websites created by their expatriate communities agitating for positive change in their native lands: Somalia, Egypt, and Nigeria.

Agitating for negative change. The last category of ideas the expatriate community sends back to Africa are those that agitate for negative change. Although encountering foreign cultures might lead expatriate Africans to adopt certain aspects of their new homes, it could also lead some, especially those with a more conservative viewpoint, to decry the perceived debauchery rampant in Europe and America. Numerous sites exist on the web condemning Western culture and its influence on the African community. Although such commentary per se is not a problem, and indeed may be a healthy sign of a free society, extremists call for a violent reaction to the encroachment of Western culture. One Nigerian terrorist organization even has this anti-Western stance enshrined in its name. Officially it’s *Jama’atu Ahlis Sunna Lidda’awati wal-Jihad*, but the people in the town where it was formed, Maiduguri, dubbed it *Boko Haram* in their native Hausa language, a name which stuck, and roughly translated means “Western education is forbidden.”¹¹

Some individuals who left nations that oppressed them for what the Western world would consider extremist religious views found the freedom of Europe and America the perfect place to incubate their radical and sometimes violent beliefs. Free to associate with like-minded individuals and use social media without restrictions, they advocate movements such as the introduction of *sharia* or attacks on Western-backed governments in their

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native lands. Ironically, they use the freedom they now enjoy in Europe and America to undermine the possible transition to more democratic and tolerant nations in Africa. Egypt is an excellent example of this situation. Although Mubarak was removed, his regime was replaced by the Muslim Brotherhood, a group that might be less tolerant of the Coptic Christians present in the predominantly Muslim nation.¹²

Remittances

If the brain drain is Africa hemorrhaging, remittances are the infusions that keep much of the continent alive. Nearly \$40 billion flowed into the continent in 2010, a fourfold increase since 1990 and representing 2.6 percent of Africa’s gross domestic product.¹³ After direct foreign investments, these remittances are the continent’s largest source of net foreign funds, although it should be noted that the actual amount of remittances is probably underestimated. Of the sub-Saharan nations, only about half of them collect remittance data with any regularity, making approximations of the total flow quite difficult.

A significant portion of the remittances are sent using a fund transfer system known as *hawala*, which is based on trust, and, with few written records, makes it even more difficult to determine the extent of remittances.¹⁴ By combining the ancient system of *hawala* with modern day telecommunications, such as the Internet and satellite phones, remittances can easily be sent from outside the continent and received the same day.

Much of the remittances pay for food, clothes, rent, school dues, and medicine. Some use the remittances to invest in businesses. However, some remittances go to nefarious activities, including narco-trafficking and terrorism. Unfortunately, the

structure of hawala sometimes makes it difficult for investigators to separate the flow of funds used for legitimate purposes from that used for illegal activities.¹⁵

Though the total amount of remittances each year is quite large, the individual sums sent are relatively small. Based on interviews, these appear for the most part to be quickly spent in local venues such as markets as opposed to being saved or spent significant distances from the recipients' homes. Thus, there is a hometown multiplier effect, as the community where a recipient lives benefits from the repeated circulation of many of these dollars in the local economy.

That the remittances make a considerable difference in the lives of Africans is undeniable. In countries where the per capita income is quite low, even a few dollars regularly sent from a relative working abroad enables a poor family to put more food on the table. In travels through Africa, the author often came across families where sometimes it was even more than money sent home; radios, television sets, and other "luxury items" were sometimes conspicuously present in

homes many would describe as huts. Occupants of these dwellings would share stories of how a brother working in France, a father working in England, or some other relative working someplace else sent enough money home to buy the electronic item now tied into the local electrical grid with some very questionable-looking wiring.

Occasionally there are also some large investments from African expatriates who have done quite well in areas such as entertainment or sports. Luxury resorts catering to foreign tourists seem to be favorite ventures for these wealthy Africans living abroad. As they create numerous jobs in Africa, bring in foreign currency through tourism, and help project a positive image of the continent to those who visit, they can be quite beneficial to Africa in general and the region they're located in particular.

From a security standpoint, these remittances have several positive attributes:

- They provide money to poor people, helping quell, through processes such as job creation and the alleviation of hunger, the social unrest that results from extreme poverty.



(AP Photo/Denis Farrell)

Patients line up for health services aboard the Phelophepa Train of Hope at Kirkwood railway station, South Africa, 1 January 2006. The Phelophepa train uses the rail infrastructure of South Africa to provide one-stop health care service for patients living in rural areas.

- They create a healthier, better-educated pool of potential applicants for military service by providing money for food, shelter, medicine, and education.

- They increase tax revenue, providing funding for defense as well as infrastructure development, such as roads critical to security.

- They give the citizens the opportunity to connect with the outside world through the purchase of radios, televisions, and time in internet cafes, although there can be both positive and negative aspects to this connection. An example of the former would be the propagation of messages, via electronic social media during the Arab Spring uprisings, to agitate for democracy. An example of the latter would be Al-Qaeda websites radicalizing young people.

Safety Valve

The brain drain is a sort of safety valve, allowing disgruntled individuals to migrate rather than foment dissent in their native lands. Of course, if one feels that certain countries are in need of more dissent, and possibly even a revolution, an exodus of educated individuals is a negative.

Individuals who might have agitated for change in their native African countries, but moved to Paris, London, or New York, can still have influence in their homelands, but their voices and actions will be somewhat muted. While the repression and corruption that led to the Arab Spring were long in development, often a local event suddenly triggered the actual uprising. Thus, it appears that leaders must be nearby to capitalize on such events. For example, in Tunisia, as soon as Mohamed Bouazizi, a street vendor whose wares were confiscated by the police, set himself on fire, local protests erupted.¹⁶ Those Tunisians who were in France, England, or the United States were obviously too far away to be a part of the initial uprisings.

By leaving Africa, agitators for change for the most part put themselves out of reach of the repressive governments they are agitating against. Their influence and ability to spontaneously capitalize on local events is markedly diminished.

Adverse Environmental Impact

Although the migration from Africa reduces the population pressures on the African environment, the loss of engineers and technicians, especially

civil engineers and water technicians, means there are fewer people with the requisite skills to tackle the numerous environmental problems facing the continent. Many of these problems have a direct bearing on national security. As an example, water shortages can lead to conflict, as happened in Darfur, Sudan, where herders in the northern part of that region, unable to feed their flocks because of drought and overgrazing, migrated into southern Darfur, encountering people who were traditionally agriculturalists. The northerners' animals grazing in southern farmlands helped precipitate a conflict that displaced thousands of people. Many observers called it a genocide when northerners, who are Arabs, in conjunction with the Sudanese government, turned to ethnic cleansing of the southern people of Darfur, who are black Africans. Had there been more environmental scientists, civil engineers, and well-educated politicians in Sudan to explain how to use the resources in Darfur in a sustainable manner, the conflict might never have occurred.

South Africa provides an interesting twist to the often-intertwined stories of environment, democracy, and the brain drain. In many African countries, the lack of political freedom is a driving force for many of the educated to leave, including civil engineers who are vital to maintaining dams and other waterworks. However, the fall of apartheid and the arrival of democracy in South Africa coincided with the loss of many of these valuable, well-educated individuals. Aggressive affirmative action policies put into place by the post-apartheid South African governments caused numerous young, white civil engineers to migrate elsewhere for work, leaving behind a country with deteriorating water quality in many large reservoirs.¹⁷

Conclusion

Although the initial perception of Africa's brain drain may appear to have adversely affected the armed forces and security of many of that continent's nations, scrutiny reveals that the situation is more complicated. For example, the loss of pilots is an adverse impact, but an increase in total remittances from additional emigration results in a positive outcome. The diminished population relieves stress on natural resources, but



(AP Photo/John Parkin)

About 600 medical students and faculty march around their campus, presenting a petition saying apartheid forces them to violate their Hippocratic oath. About 40 percent of the medical students are black, mixed-race, or Indian and are required to work at the whites-only Johannesburg General Hospital, but cannot be admitted to the hospital except in emergencies. Johannesburg, South Africa, 19 August 1988.

a loss of engineers and scientists who could tackle pressing environmental problems has negative consequences.

To reduce Africa's loss of trained professionals, European nations and the United States might consider blocking the immigration of African nationals with skills critical to their native countries. Such a policy, however, would run counter to modern-day ideals. To begin with, it would punish individuals for bettering themselves. It would also create a situation where those who are less educated would have preferential entrance to a Western country, something not necessarily favorable for the Western world. Finally, it would ask a government, as opposed to the free market, to decide which skills are critical.

There has been movement toward restrictions on recruiting healthcare workers from less developed countries. In 2010, the World Health Organization's World Health Assembly adopted the Global Code of Practice on the International Recruitment of Health Personnel.¹⁸ However, the code is nonbinding, requesting only voluntary compliance to the ethical standards of recruitment by the nations involved.

An alternative to requesting Western nations to block immigration is to have African nations place obstacles in the path to emigration of their well-educated citizens, a policy already enacted in several places. Some physician education and similar types of programs require the graduates to serve a certain number of years in-country before being allowed to go elsewhere. These appear to have had mixed success, perhaps because many well-trained individuals often come from politically well-connected families.

Many African nations could probably go a long way in stemming the flow of educated citizens through certain pro-business actions. Creating additional regional economic alliances, similar to the Economic Community of West African States, is one such step. Adopting sensible tax structures, making foreign investments welcome, decreasing corruption, and ensuring property rights are secure are others. Unfortunately entrenched and powerful constituencies make change difficult.

One way both Western and African nations can begin to address the problem is to perform cost-benefit analyses of prospective educational

programs in Africa, with realistic expectations of the percentage of individuals likely to emigrate built into the cost side of the equation. Thus, a Western military organization working to enhance the capabilities of an African nation's air force should consider what percentage of pilots, based on experiences in similar African countries, would leave for Europe or the United States after training. It might be that these nations could obtain "more bang for the buck" by purchasing artillery pieces rather than training pilots.

Along these lines, it is important to rethink policies that emphasize long-term schooling based on Western models of education. It might be more appropriate to train a large number of people to perform simple medical care than to train a few individuals as physicians who may emigrate. Thus, a military humanitarian assistance program that trains village-level practitioners, similar to the well-known Chinese "barefoot doctors," would save more lives than a program, perhaps sponsored by a different branch of the U.S. government, which invests in educating individuals for eight years in technologies readily available in Western nations but not in many African countries outside large teaching hospitals.

Performing cost-benefit analyses, while helpful in ensuring Africans use Western funds in the most efficient ways possible, will probably make only a small dent on the brain drain. Much of the training goes on without foreign funds and thus without foreign oversight. Besides, no matter the race or ethnicity, people tend to seek a better life, even if it

might mean moving far away. For educated Africans to look for the best opportunities to use their skills is quite understandable. This flight of human capital is due to a push-pull situation, with factors such as domestic unrest and low pay pushing educated individuals out of Africa, and stability and high pay pulling them to Europe and the United States.

The report *Leveraging Migration for Africa: Remittances, Skills, and Investments* presents data from new surveys finding evidence that migration and remittances reduce poverty in the communities of origin. Remittances lead to increased investments in health, education, and housing in Africa. Diasporas provide capital, trade, knowledge, and technology transfers. Thus, acknowledging that much is lost when people migrate to developed countries, the report noted that the same migration creates "opportunities."

Maybe if we called the "brain drain" a "remittance generator," many of the negative connotations associated with educated individuals leaving Africa would go away, although such a new title might sway opinion too far in the opposite direction, with images of positive cash flows replacing those of engineers leaving. So it is with the emigration of educated Africans impacting Africa's security and stability; one must get past any initial adverse impressions the phrase "brain drain" creates to realize the phenomenon has both negative and positive aspects. With proper policies in place, it might be possible to take advantage of opportunities that arise in order to minimize those negative aspects and maximize the positive ones. **MR**

NOTES

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