

THE BRAIN DRAIN FROM ETHIOPIA

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1. Human Capital Deficit In Ethiopia

The importance of human capital in the development process cannot be over-emphasised. Economic development is impossible without adequate supply of human capital and a critical mass of knowledge.

It is well-known that Ethiopia lacks human capital required for sustainable development. For example, for one physician the country has more than 70,000 persons. There are only eight diploma or degree graduates for every 100,000 population living in Ethiopia. In the 1980s, degree-holders from Ethiopian institutions of higher learning could only meet about half of the available vacancies in the public sector. Ethiopia has only 10 Ph.D. degree -holders working in the agricultural sectors out of every 100 required for the sector. Some departments of Addis Ababa University, like the Department of Accounting cover as much as 40% of the total credit hours by part-time instructors (Dejene & Yohannes 1998; ESTC 1998).

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2. The Meaning of "Brain Drain"

Different people interpret "brain drain" in different ways. In this discussion, I define "brain drain" as a special type of international migration of skilled human resources and knowledge from countries that are deficient in these resources. That is, this presentation is restricted to the discussion of the nature and magnitude of outflows of human capital from a country facing significant shortages of professionals. Accordingly, concepts like "brain wastage" and "Internal brain drain" are not part of this presentation. "Brain wastage" arises under conditions where highly qualified and trained intellectuals are misused, misplaced or discouraged from putting their abilities and experiences to good use. However, I do subscribe to the argument that brain wastage makes contribution to brain drain. "Internal brain drain", though debatable, is conceived as the flow of highly needed human resources from the public sector to sectors with high pay, like the private sector and NGOs. But, it is difficult to call this type of mobility as "brain drain", because these people do contribute to the development of their country in which they are physically present. Also, I am not going to discuss the situation where highly talented artists and outstanding sportsmen and women migrate to where the grass is greener. However, I admit that this, too, is a very serious matter requiring the attention of researchers, policy makers and international organisations. Currently, Ethiopia is bleeding through both brain drain and cultural drain.

3. The Historical and Global Dimensions of the Brain Drain from Africa

One can argue that the nature of brain drain and its consequences cannot be adequately understood without a consideration of the historical and global dimensions of the problem. Brain drain is not something new that dropped from the blue. Its origins can be traced to the rise of capitalism in the West in the eighteenth century and to the cross-Atlantic slave trade, the black gold of the time. This infamous trade devastated African economies and caused unprecedented miseries of millions of sons and daughters of the continent. West Africa was depopulated as about 22 million able-bodied persons (half of which perished along the route to the west) were uprooted. Slave raids contributed to a state of chaos, uncertainty, and economic disruption in the region. Perhaps, we call this phase of the era of international capital, the era of "population drain" to the extent that African economies are concerned. Slave labour became redundant as the machine process boosted labour productivity ushering in a higher phase of international capital.

The second phase of the growth of international capital, i.e., direct colonialism was characterised by direct exploitation of Africa's labour on Africa's soil. Capital became more profitable when it exploited Africa's cheap labour and raw materials rather than exploiting Africa's labour through forced

migration. This phase of international capital too, came to an end due to further advances in technology and independence movement in Africa following the end of the Second World War. Perhaps, we can designate this phase of international capital as one of "natural resource drain" through in-country exploitation of Africa's labour:

The third phase of growth of international capital can be designated as the era of globalisation of factors of production, investment, and culture. An important but most often neglected feature of the globalisation process is the unhindered flow of high-quality human resources to the West, to the USA in particular. Brain drain is the only major way that international capital could meet its ever-growing demand for skilled labour required by high tech industries in the metropolitan countries. To facilitate the smooth outflows of high quality human resources from Africa, the globalisation process has already put in place effective institutional technological mechanisms including: 1) economic liberalisation programmes or structural adjustment policies (SAP) which are being imposed on Africa by the Bretton Woods institutes; 2) the World Trade Organisation which bestows the West with intellectual property rights while denying Africa similar rights; and 3) unprecedented progress in information and communication technologies (ICT). These factors have contributed to the marginalization of Africa and to the ever-widening income gap between the region and the West. The globalisation process has contributed to the marginalization of

Africa not only through reductions in Africa's share in foreign direct investment (FDI) and foreign trade, but also through the loss of human capital flight, which is unprecedented in the region's long history. During the age of globalisation, international capital attaches more importance to Africa's best brains rather than to the regions unskilled labour or natural resource. The production process has become increasingly knowledge-intensive than being resource-intensive during this era. In such an era, knowledge matters a lot. That is why donors fail to provide support for brain drain reversal and for creating incentive structures for local professionals operating in Africa. Donors rather provide various scholarship programmes for further studies abroad. These programmes are most often used as a very effective means or conduit facilitating the brain drain to the West.

4. The African Diaspora

Africa's loss of scarce human resources is enormous given its low level of human capital development. In this light, UN Secretary General, Kofi Anan notes the following:

Africa's share in the world's scientific output fell from 0.5 per cent to 0.3 per cent between the mid-1980s and the mid-1990s. Africa as a whole counts only 20,000 scientists, or 0.36 per cent of the world total; and there has been a steady decline in research and development in Africa from an already low level, while the brain drain of Africa's best and brightest to the industrialised world

has increased. And, if Africa is to redress its shortfall in human resources and scientific progress, it must begin by affording the education of girls and women complete and comprehensive equality. (Press Release SG/SM/6891 DEV/2200 SAG/21 9 February 1999).

Africa has lost a third of its professionals to the developed countries between 1960-1987. Of the few professionals it has, 23,000 academics and 50,000 members of the middle to high level management are leaving the continent yearly. It is estimated that 40,000 African nationals holding Ph.D. Degrees live outside the continent (Sethi 2000).

The brain drain phenomenon is incapacitating Africa's public and private sectors and constitutes a significant financial and economic loss for the continent and thus further contributes considerably to widening the gap between rich and poor countries. It is estimated, for example, that the brain drain in the four years from 1994 to 1997 cost South Africa 8.4 billion Rands in lost income tax and 285 billion Rands in potential contributions to the (GDP). In 1997 alone, the country forfeited almost 800 million Rands in income tax and a 2.26 billion Rands contribution to the GDP as a result of emigration (Sethi 2000).

An estimated 100,000 experts from developed countries are currently employed in Africa, often through both bilateral and multilateral technical co-operation programmes. In contrast, approximately 250,000 African nationals are estimated to be

working abroad, mainly in Western Europe, North America and other parts of the World. This is **nearly half of Africa's skilled workforce**. They are attracted to stay abroad by better working conditions and **greater opportunities**. But still many of them would be prepared to consider returning for jobs that better suit their qualifications and academic background or simply for recognition and a satisfying life in their home countries (Sethi 2000).

With the recently set up Diversity Visa Programme of the US government, Africa's immigration nearly doubled from 26,716 in 1994 to 52,889 in 1996. Ethiopia, with 3,444 DV "winners" for 1996 was among the top five countries of admission to the USA (US INS, internet). DV is designed, perhaps, to meet unskilled labour shortages in USA. Most of the 250,000 Ethiopians living in USA* (of which 50,000 live in Washington D.C. alone) contribute to the industrial reserve army in that country.

5. Costs and Benefits of Brain Drain

Advocates of the neo-classical school, the theoretical underpinning of SAP argue that skilled labour out-migration from developing countries is a result, and not a cause, of lack of job opportunities in developing countries and recognise

*Interview with ETV, US Ambassador to Ethiopia, October 1997.

'brain overflows' rather than 'brain drain'. Conventional economic theory basically argues that migration of workers from low-to high-wage countries ensures a more efficient use of labour and narrows inter-country wage disparities. From their standpoint, international migration actually reduces excess supply of skilled workers in developing countries and ensures optimal allocation of previously unused or under-utilised human resources. Investment in the education and training of skilled workers by developing countries is more in the nature of a sunk than an actual cost.

Closely related to this, many highlight the significance of remittances in terms of boosting the earnings and household welfare of the families of migrants, of promoting human capital and providing valuable support to the balance of payments (Fry 1984). And there would appear to be evidence to support the view that remittances have indeed had a beneficial impact. According to a World Bank survey carried out in 1978, for example, remittances from Pakistani expatriates were higher than the country's total foreign aid receipts (Barna 1983). Without considering clandestine or in kind remittances, the World Bank also estimated that total international migrant remittances amounted to \$75 Billion per year, this being higher than total official development assistance to third world countries as a whole (Taylor and Wyatt 1996). While the importance of remittances for developing countries cannot be disputed, the problem with most of the above arguments is that they down-play the social

costs and adverse effects of outflows of skilled manpower on developing country economies. The negative consequences of skilled labour outflow on production, and eventually on employment, can, for instance, be confirmed by empirical evidence from countries like Jordan, Oman, Yemen and Egypt, where emigration in the 1980s led to serious labour shortages (Ghosh 1996).

Following the structuralist school argument, in this paper I argue that the outflow of skilled labour from developing countries, including Ethiopia, signifies not free movement of human capital between nations, but brain drain or human capital flight. This is because the costs of brain drain from developing countries outweigh its benefits, and because brain drain has involved considerable costs for those developing countries that have invested scarce resources in the training of their nationals. Since brain drain widens disparities between rich and poor nations, its consequences can be put in unethical context, whereby poor nations and their taxpayers bear the costs of training and maintaining potential migrants, and wealthier nations reap the benefits of the skills of migrants. Here it should be noted that, at one time, "the number of foreign doctors working in the US is equivalent to the annual output of thirty medical universities in the USA" (Vas - Zoltan 1979:77). From this perspective, brain drain can be regarded as a process retarding income, welfare and growth in developing countries by taking away most needed human capital (Seyoum 1992).

6. The Origins of Brain Drain from Ethiopia and the Pessimist Elite

Brain drain has become a serious problem in Ethiopia since the mid-1970s when part of the urban elite fled the country to escape from the political harassment and persecution perpetrated by the Derg regime following the Red Terror. Prior to this period, permanent outmigration of intellectuals had remained a rare phenomenon. But, since the mid-1970s outmigration has **snowballed**: One lonely migrant will pave the way for another person, and that person for other persons, and so on. This is facilitated by immigration policies of the recipient countries, which makes visas available for spouse, children and other family members of a migrant. For example, in 1994 in USA immediate relatives accounted for 31% of total immigration, out of which, the majority (56%) were spouses, followed by parents (22%) and children (21%) (US INS, internet).

Because the original migrants were motivated solely by political motives, many people still think that political persecution is behind the current brain drain. Even with excellent political environment (e.g. Botswana), brain drain is bound to be there as long as there is growing income gap between rich and poor countries. For the whole of Africa, the most important reason to leave the continent is to study

abroad (49.5%), followed by professional development (29.5%), and political reason (6.6%) (Sethi 2000). What many people forget is that outmigration to the West, to USA in particular, has now become part of the culture of the urban-based elite. Outmigration has now been institutionalised and the desire to migrate has spread like wild fire among the urban-based elite. Many aspire to migrate, and, if that is impossible, many leave no stone unturned to send a son or a daughter (or both) to the USA. For many of the elite, the USA is heaven on earth. For many people, having a relative in the USA is a prestigious achievement, a status symbol. Friends and relatives congratulate each other and hold great feasts upon success in sending a child abroad. Gone are the days when the young, the educated rallied around one goal: first change Ethiopia and your life will change for the better, accordingly. Today, the motto is: flee Ethiopia and change your own life; look after your own selfish interest. The majority of the elite envisage no prospect for improving the fate of this country.

Why and how did this dominant view emerge? That, I leave it to the social psychologist. Let them investigate the frustration, hopelessness, resignation, and individualism that have become part and parcel of the majority of the young and the educated in Ethiopia. What I would like to point out is rather that economic problems underlie changes in attitudes and the world outlook of people. In short, it is the aggregate and micro-level economic deterioration of the country that gives rise to frustration and pessimism. Brain drain worsens

under conditions of economic crises, although it is there even in booming economies, like that of south Korea or Taiwan. The existence of economic crisis underlines the importance of conducive policy environment and a new international economic order in combating brain drain and retaining potential migrants.

7. The Magnitude of Brain Drain From Ethiopia

The brain drain from Ethiopia has assumed alarming proportions. A cursory look at CSA's data on the number of students officially sent abroad for studies between 1968/69 and 1995/96 suggests that each year an average of 238 students or 35% failed to return to Ethiopia. A study of four government organisations, including Addis Ababa University, showed that out of every 100 professionals sent abroad for further training between 1982 and 1997, 35 failed to return home (Dejene & Yohannes 1998). The study further suggested that female professionals have higher propensity to migrate than male professionals. Out of 100 female professionals sent abroad for further studies, over the same period, 43 failed to return home. Profession-wise, medicine registered the largest ratio of non-returnees to returnees to Addis Ababa University. Moreover, the extent of brain drain has increased with the level of education received by the migrants. As many as 83% of the non-returnees hold two or more degrees. The highest proportion of non-returnees has been reported for doctoral

candidates going abroad for specialisation. This finding is in agreement with a comprehensive study undertaken by the IMF (Carrington & Detragiache 1998), which concluded that: "there is an overall tendency for migration rates to be higher for higher skill levels, suggesting that migrants are generally better educated than the average population".

8. Deliberate Immigration Policies of Industrialised Countries: A Neglected Pull Factor

In discussing the causes of brain drain, researchers focus attention on the well-known push factors and often neglect deliberate immigration policies of Western countries as a contribution factor.

In addition to various subtle and illusive strategies of facilitating skilled labour migration to West, international capital and its agent (the state) employ different policy instruments to cover domestic deficit in the skilled labour market. For example, the USA, the world's biggest market for high quality labour, has already put in place an effective immigration policy to attract professionals from developing countries. The Immigration Act of 1990 (IMMACT 90) allotted higher proportion of visas to highly skilled immigrants. Prior to this act, 27,000 visas were issued to highly needed skilled immigrants and their family members. But, beginning 1992,

approximately 110,000 visas (per year) became available to highly skilled immigrants and only 10,000 to unskilled workers (US Immigration & Naturalization Service, internet). A 1998 bill passed by US Congress allows an annual increase of 50,000 working visas to be issued to foreign nationals working in the information technology sector (D&C 1999). The justification for such a policy is occasionally provided by top officials of US governments. For example, the former Secretary of State, Dean Rusk said the following at the hearing of a sub-committee of the House of Representatives:

The US has a rare opportunity to draw immigrants of high intelligence and ability from abroad; and immigration, if well-administered, can be one of our greatest national resources....we are in the international market of brains (Vas-Zoltan 1979:67).

9. What is to be done?

Three further questions are in order. First, what policy measures should be taken to reverse brain drain from Ethiopia? Second, what measures should be taken to retain potential migrants? Third, how can Ethiopia make the best use of the Diaspora?

Much has been said about the first one. I will not deal with that question. I am sure that some migrants are ready to return under certain conditions. A survey of Africa-wide returnees has suggested that there are some migrants who

desire to participate in their country's development (Sethi 2000). What I would like to underline is that the brain drain can never be reversed without putting in place positive measures such as attractive incentive structures and good working conditions **for professionals currently working in Ethiopia.**

Rather, I would like to dwell on the third question. Ethiopia should not expect that all migrant professionals would return home in the foreseeable future. Ways should be found to mobilise the knowledge and investment funds of the diehards, those who would never return under any circumstances.

One way to tackle with this problem is to encourage the establishment of intellectual/scientific Diaspora **networks** involving skilled migrants, professional associations in Ethiopia, academic/research institutions, Ethiopian Science and Technology Commission, and Ethiopian Investment Authority, and similar institutions. Regional and sub-regional research networks and organisations in Africa (such as OSSREA, CODESRIA), too, have roles to play. The purpose of the network is to mobilise potentials of migrant professionals to contribute their skills, expertise and invisible funds to the economic and social development of Ethiopia by setting up linkages and connections among members of the Diaspora and between them their counterparts and organisations in Ethiopia. To this end, specific activities, such as joint research projects, conferences, newsletters, visiting scholars

programmes, etc. need to be organised. In this way, permanent migrants could be in a position to help **transfer technology, knowledge, and investment funds to Ethiopia.**

Today, there are forty-one expatriate knowledge networks around the world. These networks are linked to thirty different countries of origin. What is disturbing, however, is that out of these networks only six are linked to African countries. Of these, one can mention the South African Network of Skills Abroad. All of these networks have a **web site**, which is the initial entry point for potential members. The networks are **independent, non-political and not-for-profit organisations.** Many of them have links with the Department of Science and Technology in home countries. For example, the Association of Thai Professionals in North America has strong linkages with the Science and Technology Department of the Thai Government (Brown 2000). Thailand promotes "**brain circulation**" virtually on the **Internet.** Under a project known as "the Reverse Brain Drain Project", the network of Thai migrant professionals identifies and attracts experienced high-level Thai professionals living overseas to participate in specific development projects (Damtew 2000). In short, the networks help the brain drain turn into **brain gain.**

However, networking cannot be taken as the only option available to policy-makers. Every available means (except restrictive policies) could be explored. Accordingly, one can

recommend additional options like **incentive polices** designed to make emigration less attractive (although salaries and infrastructure in Africa cannot be comparable to those in developed countries); brain reversal schemes; **compensatory policies** (where both the individual migrant and the receiving country get taxed or compensate the sending country). After all, "if physical capital must be paid for why should publicly financed human capital be received free?" (Thomas in Vas-Zoltan 1979).

Finally, all said, one point should not be forgotten. Our knowledge of the potentials of the Diaspora is highly limited. Without adequate and reliable information, we can achieve very little. Let's undertake further research on this vital area.

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