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# Brain Drain: Economic and Social Sufferings for Bangladesh

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## **ABSTRACT**

This paper presents the alarming issue of brain drain with the causes that are responsible for the migration of academics, doctors and engineers from Bangladesh to developed countries. Bangladesh being one of the least developed countries needs its talents to stay to contribute to the development. But majority of these highly skilled immigrants do not come back after completing their study or training and start living in the foreign countries. Lack of opportunity, higher standard and insecurity are some reasons behind their immigrations. After exploring the causes, the paper also examines the suffering of Bangladesh in want of native talent. Some real life cases have been obtained through interview which are analyzed and presented through charts. The suffering goes bigger in the health sector, education and science and technology. The loss of Bangladesh and ways to reduce this is the key concern of this research.

**Keywords:** Brain Drain; Migration; Bangladesh

## **INTRODUCTION**

Most of the people use the terms brain drain, brain exchange and brain circulation interchangeably. But there are some differences between the three. By Diehl & Dixon (2005), brain drain is the one-way flow of skilled and educated people for the expectation of better career and lifestyle. On the other hand, brain exchange implies “a two-way flow of highly skilled individuals between a sending and receiving country” by Torres and Wittchen (n.d p.1), and brain circulation means the cycle of moving abroad to study or gain skills in one country and then coming back home to work (Diehl & Dixon, 2005).

From the very beginning, Asian doctors, engineers, teachers, researchers are precious human capital for the developed countries. To draw the attention of these highly skilled foreign students the countries are offering scholarships and incentives. As a result, developing countries like Bangladesh, India and China, which are major contributors of highly skilled migrant workers, are confronted with challenges in order to retain them. According to the Bangladesh Bureau of Migration, Employment and Training (BMET), during 1976-2008 about 6.57 million citizens left the country for employment abroad within which 4% are professionals, i.e., doctors, engineers, teachers and nurses. (Naim&Iftikhar, 2008). Because of brain drain source countries suffer not only on the investment they have made on education and training of highly skilled people but are often compelled to hire foreign consultants to fulfill specific development needs (Naim&Iftikhar,

2008). In this article, the negative effect of brain drain has been the point of focus as its impact is growing rapidly which calls for the issue to address them properly in order to help the source countries remain enriched with the scholars grown within and serve the nation they were grown up in.

The objective of this paper is to find out the major causes & behind brain drain and the suffering it creates on Bangladesh and to suggest some ways to reduce the negative effect of brain drain.

This article is divided into four parts: the first part contains a literature review on brain drain of different professions; the second part presents the research methodology used in this work, the third part comprises of the discussion on sectors, causes and sufferings in Bangladesh. The final part consists of conclusions and implications of this research.

## **LITERATURE REVIEW**

“The movement of scholars from one country to another is known by numerous synonyms - Brain drain, brain hemorrhage, and also as brain circulation” (Teferra,2000, p.1). The controversy over the concept has been such that some refute concerns over the issue as emotional nationalistic nonsense (Das, 1974) while others urge for a serious commitment by some developing countries, particularly Africa, to staunch the serious outflow of their trained personnel (Sattaur, 1989). While one school of thought treats such movements as an extreme form of institutional nomadism (Hountondjii, 1990) another views it as a circulation of skilled labor in the emerging interdependent global economy (North, 1992). Brain drain is also occasionally referred to as 'Human Capital Flight' and thus, this highly unwelcomed phenomenon eventually results in the depletion of the intellectual or professional resources of a nation (Jamal, 2011).

In the 1980s migration for education from Bangladesh was generally limited to tertiary level. Under bilateral and multilateral arrangements scholarships and fellowships were offered to university teachers, technical experts and members of government and autonomous research institutions essentially to pursue higher degrees in sciences, engineering and to an extent arts and social sciences (Development Research Center on migration, Globalization Poverty, n.d.) which was perceived as the root of today's brain drain. Teferra (2000) mentioned that the motivation of scholars to migrate- be it regional or international or their decisions to stay abroad is a product of a complex blend of economic, political, social, cultural, and psychological factors. The impact and chemistry of each factor varies from country to country and individual to individual and fluctuates with time –even for the same individual. Several studies represent the negative effect of the brain drain on the source countries. Bhagwati& Hamada (1974);Miyagiwa (1991) presented that the brain drain creates a development challenge not only because developing countries lose out on the relatively high contributions to total output by high-skill workers, but also because of the positive externalities the workers generate. When these people leave their native countries for greener pastures abroad, their level of participation in economic and social issues are diminished.

The prospect of a harmful effect of brain drain is often one of the first concerns raised in policy discussions around migration, and every day the news is filled with statements such as “the Philippines is suffering a crippling brain drain”, “brain drain still a big concern” in India; and that Bangladesh “must stop brain drain to take the country forward” (Mckenzie, 2010). However, in depth research on high highly qualified migrants of Bangladesh is limited. This led us to conduct a study to identify the major causes which are leading brain drain in this country with the suffering that follows here.

## METHODOLOGY

The study is based on both primary and secondary data. Primary data were collected through informal conversation with migrated doctors, teachers and engineers. A structured questionnaire was developed to collect information regarding the reasons for migration, feeling of staying away home and any plan to come back. Though it was very tough to communicate with migrated professionals, data have been collected from twenty four such professionals (eight doctors, eight teachers and eight engineers) from our acquaintances working in Ireland, Australia, Canada and London. Pie chart and bar diagram have been drawn based on the interview. Three real life cases have also been presented to support facts. The secondary data were collected from some renowned national and international organizations and the published materials.

## MIGRATION AND BRAIN-DRAIN

BMET classifies migrants to the Middle East and South-East Asia into four categories: professional, skilled, semi-skilled, and unskilled. Professional workers include doctors, engineers, teachers, and nurses; skilled workers include manufacturing or garment workers, drivers, computer operators, and electricians; semi skilled workers include tailors and masons; and unskilled workers include housemaids, agricultural workers, hotel workers, and such basic laborers as cleaners, cart loaders, and cotton pickers. Generally, the class of migrated professional workers is termed as brain-drain. Figure 1 and table 1 show number and percentage of migrant workers from 1976 to 2009 in Bangladesh.

Table i. Number of migrant workers by profession, 1976-2009

Overseas workers by profession, 1976-2009		%
Professional	181,336	2.26
Skilled	2,079,228	31.56
Semi-skilled	1,091,766	14.28
Unskilled	3,388,857	51.90
Net migration rate	0.5 migrant / 1,000 population	100

Source: Information is collated by the International Organization for Migration (IOM) from BMET

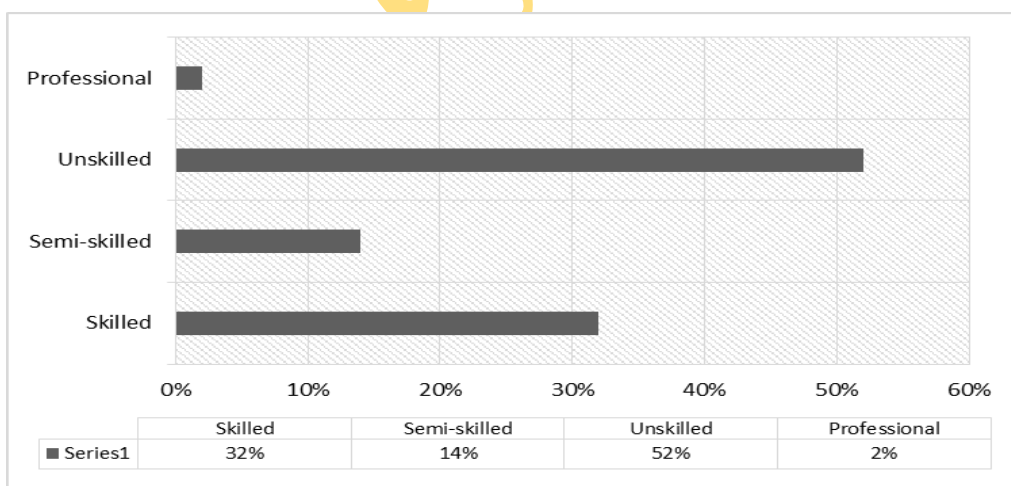


Figure 1. Percentage of migrant workers by profession, 1976-2009 (Source: BMET, 2009)

## SECTORS OF BRAIN DRAIN IN BANGLADESH

According to migration and Remittance Fact book, 2011, the position of Bangladesh is second among the top 5 emigration countries (India, Pakistan, Afganistan, Srilanka) in South Asia. Table 2 shows number of South Asian immigrants to the USA level of educational attainment, 2000. From the same source, in 2010, emigration rate of tertiary educated population rose to 4.3%; among them only 1,912 or 6.5% were physicians trained in the country.

Table ii. Number of South Asian immigrants to the USA level of educational attainment, 2000  
*Number of South Asian immigrants to the USA level of educational attainment, 2000*

Country	Educational level			
	Immigrants	Primary & less	Secondary	Tertiary
South Asia				
Bangladesh	69,180	6,000	20,095	43,085
India	836,780	41,185	127,540	668,055
Pakistan	165,425	11,630	43,365	110,430
Sri Lanka	2,820	495	5,695	15,630

Note.

- Immigrants defined as foreign born population in the USA age 25 years or over.
- Primary education or less corresponds to 0-8 years of schooling.
- Secondary to 9-12 years of schooling.
- Tertiary to more than 12 years of schooling.

Source: A Study of 24 Labor-Exporting Countries. World Bank report, June 2003

In Bangladesh there are 4 sectors experiencing brain drain extensively; doctors, teachers, engineers and agricultural researchers.

**Doctors:** Statistics show that 65% of the newly graduated doctors attempt to get jobs abroad. On an average 200 doctors from the government sector go abroad every year. At present around 1000 Bangladeshi doctors are working in different countries of the world (Haque, 2005 et.al. cited on Adkoli, 2006).

**Teachers:** Another large sector facing brain drain is universities. In Bangladesh Dhaka University faces the largest faculty crisis because of brain drain. Karim & Jayef (2011) suggested that teachers of the science faculty face the highest brain drain than other departments. Until 2006, the number of teachers leaving the University for higher education is 139; and among them 81 is only from science department. Another research in 2014 said that about 510 teachers are on unsolicited leave from 34 public universities of the country who are considered as the prime candidates of brain-drain (The Daily ManabJamin, 2014).

**Engineers:** From a personal interview taken on 2012, in 2006-2011 from Local Government Engineering Development (LGED) about 59 engineers left the country for training and higher study purposes, among them only 45 returned in home country (personal interview, March 4).

**Agricultural researchers:** In 1997-1999, 137 scientists quit various research organizations under the National Agricultural Research System (NARS), which is comprised of 10 institutes and Bangladesh Agricultural Research Council, according to the Agriculture Commission Report 1999. The number of scientists who left the agriculture institutes such as BRRI (Bangladesh Rice Research Institute) and BARI (Bangladesh Agricultural Research Institute) might be 400. Many of them, including breeders, entomologists and soil experts, went abroad for higher studies but did not return from countries such as Canada, Australia and the USA. (Parvez, 2011). Figure 2 shows four main occupational areas of Bangladesh that are facing brain drain each year.



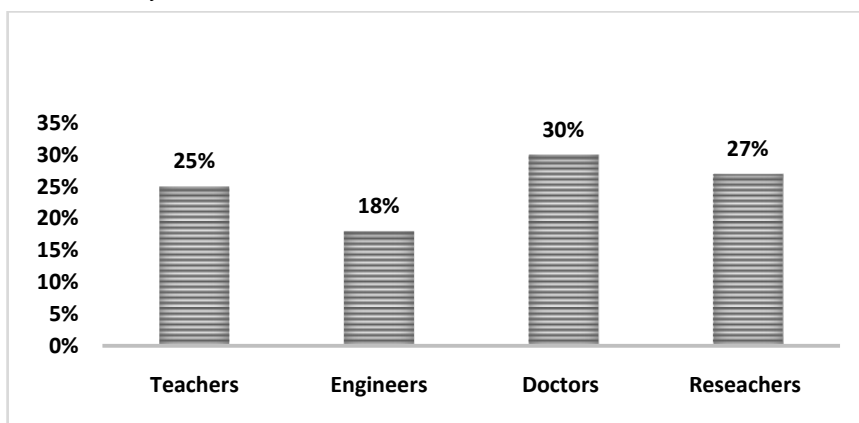


Figure 2. Percentages of professionals in Bangladesh experiencing brain drain.  
Source: Personal Interview, January-March, 2012

### CAUSES BEHIND BRAIN DRAIN

Various factors fuel brain drain. The factors can be divided into two (figure 3); push factors and pull factors (Kazlauskienė & Rinkevicius, 2006). The push factors are miserable characteristics in the country of the origin which produce emigration. On the other hand, pull factors are the alluring features in the country of destination which induce immigration. The factors are discussed below:

**Insufficient opportunity for research and higher study:** Our public as well as private universities do not have adequate fund for a first-rate research. Teachers, students have to hang around year after year to develop a research fund. Even the University of Dhaka which was once called ‘the Oxford of East’ fails to provide its students the opportunity of modern research and experiments; students of pure subjects like pure physics, chemistry, mathematics and biology are suffering in this regard.

*Case 1: Ratul, one of the brilliant students of Dhaka University in molecular biology. As he was a brilliant student from the very beginning he had an opportunity to join as a faculty member in the university. But after publishing the M.Sc result he left for Tokyo, Japan. According to him, though he could join in Dhaka University after publishing the result, he could not continue such a way for a long time as there is limited opportunity for research and higher study here and there is no career value of a teacher without research. And for this reason he left the country without any delay.*

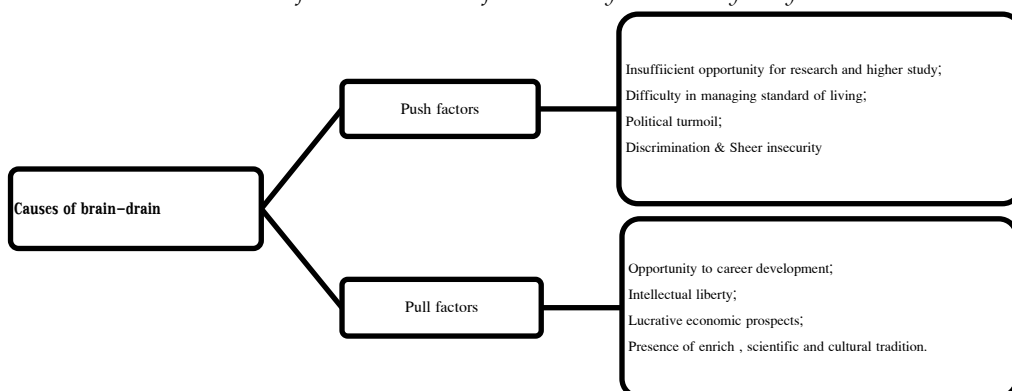


Figure 3. Causes of Brain-drain

**Difficulty in maintaining standard of living:** Fast increase in population and no or slow increase of our wealth results in many problems like food problem, sudden fall in income level, price hike in daily necessities, excessive traffic in road etc. which in turn hinders our standard of living.

*Case 2: Opu, after completing M.Com from Dhaka City College he aired to UK for higher studies. In UK as there is no value of Bangladeshi degree he had to complete again and got a good job. However, after passing some years, he came back to Bangladesh with a dream of prosperous life and got a job in a multinational company. Though he is happy now, but he could not touch the standard of living that he had left behind in London. According to him, "though in London, life is not so easy like Bangladesh; life is fully secured there, no traffic jam, no load shedding and no political disorder."*

**Political turmoil:** Because of session jam, killing of students for political reasons, use of political power in university admission to achievement of a seat in student dormitories etc. students are losing interest on the universities of Bangladesh and trying to go developed countries for graduation, higher studies and for a secured life.

*Case 3: Tareq, after completing LLB & LLM from Dhaka University he left for London and again achieved LLM degree from Queen Mary, University of London. Once he was asked by one of his Bangladeshi acquaintances about choosing such a profession which is full of dishonesty, fabrication and deceitfulness (from Bangladeshi perspective our lawyer and judge are one of the deceitful persons). As an answer, he said that like Bangladesh corruption in London is not so easy. In Bangladesh it is rare that had to come under the legislation of the country; though he faced so it is easy for him to come out through the loophole of law by using political power. And for this reason, such type of profession like police, lawyer, judge etc. can easily achieve the faith of mass people.*

**Discrimination:** Favoritism in appointment and promotion, bribery etc. are the ordinary phenomenon in Bangladesh that presents examples of being on better position with lucrative pay package just because of familiarity or some influence of political leaders. False So young generations go developed countries for having their higher education and start their career for nonbiased environment.

**Sheer insecurity:** In Bangladesh the lives of people are not safe at all. Road accidents, political unrest, murders by robbers, hazards from a constructed building, environmental hazards caused by manufacturing industries have become a common source of health hazards for our general mass and all of them are originated because of avoiding of statutory laws of the country.

**Opportunity to career development:** Research suggests that approximately 2.5 million job-seeking Bangladeshis to remain unemployed every year (Jamal, 2011) and 70% students of the country do not get their desired job after completion of their post-graduation and have to maintain their lives by doing jobs that just do not match their educational background. But it is true if a person manages a foreign degree it is easier to get a sound job.

**Intellectual liberty:** it has been observed that some people leave the job as they do not get freedom to work their own way. They prefer work in abroad as they get intellectual freedom there.

**Lucrative economic prospects:** In Bangladesh, a junior doctor can only earn around 5000 to 8000 taka per month which is approximately \$80 to \$125 during year 2005. Even an uneducated businessman can earn at least five times more than that. A junior doctor's pay is not sufficient to live a basic life (BBC News, 2005). On the other hand, most of the developed countries like America, Canada, Australia, Malaysia, and U.K ensure better economic prospects for its nationals as they have no regular political instability, sudden

price hike and active black market.

**Presence of enriched, scientific and cultural tradition:** Some of the people leave the country to love others' so called modern culture. It is shocking but true that some people find it a matter of pride and dignity to work as an employee in foreign countries. UNDP estimates loss of \$2 billion a year because of the emigration of computer experts alone to the U.S.A. from the developing countries like Bangladesh itself, Mexico, Pakistan and India. Recent surveys also show that Indian students going abroad for their higher studies costs India a foreign exchange outflow of \$10 billion annually. This is testament to just how much we, the people of developing nations, believe that life in developed nations is much better (Jamal, 2011)

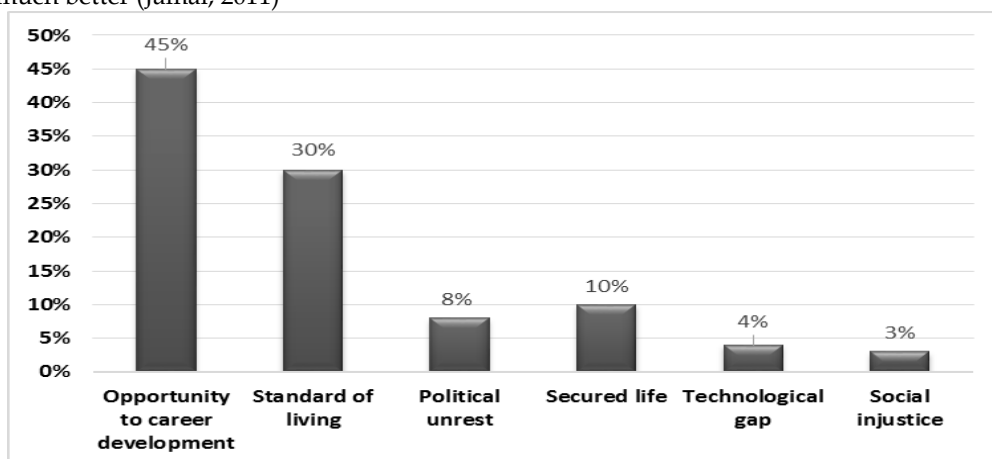


Figure 4. Dispersion of different factors affecting brain drain  
Source: Personal interview & field work

In figure4 shows dispersion of different factors contributing brain drain from Bangladesh. Among the six factors, first three factors; i.e., opportunity to career development, standard of living and secured life lead Bangladeshis to go abroad most of the time.

## SUFFERING IN BANGLADESH

**Nation without scholars:** A nation is thought of to be modern and sophisticated by assessing the extents of its technological developments in the field of science and industry. The main foundation of the knowledge and know-how for these technologies is the educated and motivated individuals who include scientists, doctors, engineers, teachers, business pioneers, etc. But in a country like Bangladesh where most of the people are illiterate, progression in development is at stake. On the other hand, the people who are educated and capable of contributing towards the development of the nation prefer to live abroad and contribute to the welfare of foreign countries.

**Misuse of state fund:** Government invests its huge amount of money to its children so that they can help the country to be developed one. But when the highly educated persons leave the country and become the assets of other nations' the investment becomes lost. Research tells that Bangladesh lose almost 10,000 skilled personnel to the developed world every year.

**Healthcare losing credibility:** There are millions of children suffering from malnutrition and childhood illnesses. Moreover, every year thousands of people die because of untreated diseases. Even though there are free treatment plans available, the doctors that are accessible



are usually inexperienced. It can be easily imagined what improvements the newly graduates could have made in the country if they were to practice there. The public is also well aware of this fact and, therefore, whenever a complicated operation is to be performed, the patient, if he happens to be from wealthy family, is rushed to foreign countries like Singapore, America or Great Britain (Sultana, 2007). The destiny of the poor patient, on the other hand, lies in the hands of the inexperienced doctor. To face the situation, sometimes, in-house hospitals have to hire foreign doctors at a high cost to draw patient customers.

**Society remains without homegrown talent:** The common conception among the people of Bangladesh is that anything "foreign" is better. Recently, people rather go and struggle to survive in a richer country than struggle in their own land. Brain drain also impedes social capital as well as social networks and value of the society. As the person departs from own country, the family, friends, society as well as the country cannot get the person whenever they feel the need; social bonding becomes slack. Again, in some cases people accept the foreign cultures such a way that they forget their own or merge own culture with the new one & they start losing the value of their origin. Half of the foreign-born graduate students in France, UK and USA remain there after completing their studies (Martin et.al, 1998). Among the doctoral graduates in science and engineering in the USA in 1995, 79% of those from India and 88% from China remained in the USA (Cervantes & Dominique, 2002).

## CONCLUSIONS

From the discussion it is felt that the problem is holding back the growth of every sector of knowledge, science, and technology and as a whole giving birth of another poor country in the face of the earth. So, for our betterment the problem must be solved.

It has been estimated that foreign scientists from developing countries who are involved in research and development produce 4.5 more publications and 10 times more patents than their counterparts at home because of proper political decisions, funding, infrastructure, technical support, and a scientific community that are generally unavailable in developing countries (Dodani&LaPorte, 2005). To solve the problem Government of the country can increase funds for research and development both for students and other professionals instead of offering money in other bogged down projects. Again, a number of rich people in Bangladesh earn more but tend to evade tax. This tax collection should be ensured and should be used in increasing salaries as well as increment of research work. Work environment, transparency in leadership, security of life and money, better pay with required increase, recognition and job security should be highlighted to stop moving into developed countries for better salaries and wages. Government should bring a change in our higher education system where students will get more opportunity for field as well as technical work. Entrepreneurs should also focus on establishing more IT firms, banks and hospitals to preserve talents. There should be a policy for foreign experts, teachers, and doctors to work or stay at least two years in the home or host countries which can save large hiring money. Another important option would be sharing and publicizing the inspiring life stories of the talented person which may encourage the new generation to work for one's homeland. This intrinsic desire works way better than any kind of incentive plans.

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