

## Strategies for Reversing the Brain Drain of Pakistan through Brain Circulation and Diaspora Option

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**Abstract:** The migration of skilled workers moving from their native countries to host in pursuit of economic opportunities has a negative effect on the native countries in terms of cost of leaving, shortage of skilled human resource and overall economic development of those countries. Such movement of skilled human resource is called Brain drain. In the prevailing Global scenario of competition, it would not be a wise move to solely focus on reversing and discouraging the Brain Drain. As human resource can be more productive and developed by exposing to continuous training and learning which can only possible if we let a specific portion of our brain to developed countries for the sake of more skills and knowledge. However, government should fulfill its utmost priority to attract and engage that Brain by providing congenial atmosphere to help and support that Brain to contribute its share in the National Economy.

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### Introduction:

Movement of people in tribes or clans is a phenomenon which can be traced with the foot prints of human civilization. These have been conflicting views about the cost and benefits of migration (Bhagwati, 1973). The movement of skilled human resource from home country is called Brain drain. It is becoming a global problem and Pakistan is of no exception (Nazish et al, 2012). The migration of skilled workers moving from their native countries to host in pursuit of economic opportunities has a negative effect on the native countries in terms of cost of leaving, shortage of skilled human resource and overall economic development of those countries. A plethora of research studies have been conducted to find out the causes and consequences, outcomes and antecedents of brain drain (Abu-Rashed & Slottje, 1991). Pakistan is also facing the shortage of skilled labour and every year a substantial number of migrants are leaving to abroad including Gulf States and Organization for Economic Cooperation and Development (OECD) (BEOE). If taking only medical physicians alone, four thousands are migrating each year to developed countries for economic gains and better social living (Nazish et al, 2012). As the country is enjoying the benefit of migration of the Diasporas in the form of remittance, however, their movement deprived the country and its people of technical and skilled workers that in the long run incurring a cost of brain drain.

Pakistan is the 6<sup>th</sup> largest populated nation of the world having the population of 191 millions in 2013 with a labour force 60.36 millions which make it the

9<sup>th</sup> largest country in the world (Pakistan economic survey, 2012). However, despite its worthy capital, concrete policies have not been made so far to retain that labour force. Since few decades a visible change has been witnessed in the number of skilled labour migration which, resultantly, caused the “Brain Drain” in Pakistan.

As brain drain is a global phenomena and Pakistan is of no exception. It is also facing the issue of brain drain and a large number of skilled, technical and unskilled human resource are leaving the country migrating to those countries which offer them high salaries and better economic opportunities.

Researcher studies have been conducted in many parts of the world to prevent and reverse the phenomena (Dovlo, 2003; Giannocolo, 2004, Soon, 2008, Nazish et al, 2012 ). Countries like China, India and South Korea devised strategies to gain their brain and successfully implement it by attracting a major portion of its lost brain (Daugeliene and Marcinkeviciene, 2009). Research studies identified brain circulation (David et al, 2008) and diaspora option, two useful strategies for bringing back the lost drain (Mayer et al, 1997). The current research study is also aim to formulate multiple strategies by adopting different models and concepts successfully applicable in above mentioned countries. Besides, the current study would serve the purpose of policy guide lines to the government for tackling the issue of intellectual and skilled migrants’ outflow.

**Theoretical Frame Work Derived from Literature:**

The literature section is based on two sections. Section (I) consists of brain circulation, its importance and its role in regaining the lost brain. While section (II) includes the Diaspora option, adopted by China and to a great extent India for utilizing their Diasporas in the economic developments.

#### **Brain Drain:**

The term brain drain was first coined by the British Royal Society of London in 1952. This term was used for the movement of skilled labours from their native to host countries. It was observed that during that period of time Russian scientists and technical workers were migrating in a outsized number from former USSR to the United States of America (Giannoccolo, 2004). In the early and late 1960s the US government undergone through different legislation in order to curb that inflow of migrants from different countries of the world as such movement created the different problems for US government (1967, 1968a, 1968b).

Bhagwati and Hamada (1975, 1977) suggested a Brain Drain Tax on developed countries by less developing countries for two reasons, to restrict the free movement of brain drain and to financially compensate the less developing countries. In 1990s, the concept of Brain Gain was evolved that stated that a country could counter the negative impacts of Brain Drain by inviting and attracting talent through emigration (Tung, 2008).

#### **Brain Gain and Brain Circulation:**

Researchers identified the importance of brain circulation for the economic development of countries by attracting skillful workforce. Brain circulation goes one step ahead than brain drain and brain gain. Its scope is broad enough as it not only focuses on gathering of scientists working in other countries but also researchers of other countries.

Brain Circulation is in fact the outcome of Brain drain and Brain Gain (Blitz, 2005). Findings of research studies show that Brain circulation is more appealing to the economies of nations as compared to Brain Drain and Brain Gain as in the former, skilled labour can be freely and easily mobilized (Blitz, 2005; Kuznetsov and Sabel, 2006; Le, 2008; Saxenian, 2002; Tung, 2008; Yun-Chung, 2007; Teffera, 2004). Brain circulation is a two way movement of skill labour between home and host countries (Yun-Chung, 2007). Similarly, Blitz (2005) argued that Brain circulation led to the movement of professionals that act as knowledge carriers. Economic development of countries can be elevated when a country has the potential to gather high qualified skilled human resource. However, accumulation alone cannot bring fruits as some other factors are also imperative such as provision of

congenial working conditions to absorb that brain (Chacko, 2007; Mahroum, 2005; Gaillard and Gaillard, 1997; Zweig, Fung, Han, 2008; Suntharasaj and Kocaoglu, 2008).

Vertovec (2007) focus on this point and argues that the movement of skilled workers should be unrestricted and comfortable so that both home and host countries may take benefit of them. He further explains such arrangements would not only help the countries to overcome the shortage of skilled human resource, but also, beneficial for the skilled workers in terms of monetary compensation and financial gains.

#### **Brain Circulation Through Diaspora of Neighboring Countries:**

##### **Indian Diaspora:**

Indian government was seriously facing the problem of Brain Drain as its skilled workers, technical labours and IT experts were leaving the country at high rate. However, Indian govt mapped out some prudent policies to reverse that Brain Drain, by providing economic opportunities and friendly atmosphere where Indian Diaspora can utilize its skill and abilities (Chacko, 2007). They skilled Indian workforce not only invest their abilities and competencies in IT sector but remarkable contribution has shown in accounting, finance and management sectors (Behrman & Rodinelli, 2002). The two cities Hyderabad and Bangalore were made the hub of IT industries and IT parks and digital technology infrastructure were developed. In this way the brain that drained out were circulated in the country's economy (Chacko, 2007).

##### **China Diaspora:**

China was facing the same problem of brain Drain as India till the end of 1980s, especially after the incident Tiananmen Square skilled migrants where refused to come back. In between 1978 and 2006 1 million Chinese migrated from China and only 300000 returned back (Zweig and Chen 1995). However, in early 1990s Chinese govt started reconsidering its policies towards the Brain Drain. During the government of Deng Xiaoping a soft corner was developed by the Chinese govt for the skilled migrants by inviting them to contribute in the economy. In 2002, Chinese govt some policies in order to attract the Chinese diaspora for the socio economic development of the country. Some of the measures taken by the govt are below following:

- i. Provision of jobs for the returnees
- ii. Accommodation facilities for the skilled and technical returnees along with family.
- iii. Extension of their contracts
- iv. Generous support in terms of research (David Zweig, 2004)

According to Mayer et al,(1997) developing countries try to compensate the loss of human capital incurred through Brain Drain, by inviting their citizens to contribute to their motherlands. Mayer et al, (1997) called this strategy as “Diaspora Option”. Such strategy is similar to brain circulation as diaspora contributed through its skills and knowledge however; different in a sense that flow of information is directed towards home country without physical mobility of human labour (Gaillard and Gaillard 1997).

China adopted the some measures as adopted by Taiwan and South Korea during 1980s and 1990s to reverse the flow of brain drain. Its Diaspora returned back to homeland where the expanding global market provided entrepreneurial opportunities for returnees (Zweig et al. 2006). Many Chinese working abroad were willing to utilize their expertise for their homeland. Researchers suggested govt to maintain a proper record for those migrants so that they might contribute in the economy (Wang, 2000). In 2001 the govt chalked out a policy of “Serving the Nation”, an appeal to the Chinese diaspora to invest their money, skill and knowledge in national economy. That Diaspora option worked and Chinese businessmen, scientists and researchers began to bring their expertise and resources back to China. According to reliable statistics 25percent Chinese migrants in one form or other served their country (Chen Xuefei et al., 2003)

Pakistan is the neighbour country of China and India faces the same problem of Brain Drain. According to the reliable estimates of Ministry of Overseas Pakistanis and Human Resource Development, almost 2765 789 Pakistanis migrated to other countries of the world, including technical experts, doctors and engineers to the OECD and Gulf countries.

It is further revealed that 5,873,539 Pakistanis have moved abroad from 1981 to 2012, out of those 41,498 professional and technical workers left in 2012 alone (Tribune, 2013). Brain drain in Pakistan can be categorized in to three main eras.

- i. From 1950-1970
- ii. From 1970-1990
- iii. From 1990- till date

**i. From 1950 -1970:** The first wave of Brain Drain in Pakistan was extended from early 1950s till 1970s when labours from Pakistan migrated abroad especially to United Kingdom (UK) as rehabilitation and reconstruction was underwent in Europe after Second World War (WWII). The core reasons for the migration were push and pull factors as wages in UK were higher than Pakistan (Shaw, 2000).

**ii. From 1970s-1990:**

The second outflow of skilled workers started from 1970s when government at that time officially encouraged the local workers to migrate developed countries especially Gulf countries as oil was explored and labours were required in large number. An estimated more than two million technical and non technical workers migrated in that time period and became the largest foreign workers group at that time (Migration and Pakistan, 2012).

**iii. From 1990s-till date:**

In 1990s a trend of international migration was also continued however, that time a change was witnessed as talented youth migrated in bulk and their destiny was United States of America (PPAD,2012). Research shows that almost 10million Pakistanis are living abroad today in different countries contributing their shares in the economic development of these countries (Haour Knipe and Davies, 2008). According to the Bureau of Emigration and Overseas Employment the numbers of migrants have been increased since 1970s. the figure shows that the total numbers of workers migrated in 1970-1980 were 604,559, 1,272,027 in 1981-1990, in 1991-2000 it touches the figure of 2,472,319 and till 2010 it struck the ever time 2,472,319. That shows an upward trend in workers movement abroad.

**Causes of Brain Drain in Pakistan:**

Following are the key factors, identified by different research studies (Nazish et al,2012; Adkoli, 2006; Sajjad,2011; Ali et al,2006), responsible for brain drain in Pakistan.

**1. Economic Factors:**

- a. Lac of development
- b. Socio- Politics Factor
- c. Organizational Factors

**2. Socio-Political Factor**

- a. Inconsistent policies by successive political government
- b. Laws and Order
- c. Political instability
- d. War against terror
- e. Ethic/ religious extremism and discrimination
- f. Educational Factors

**3. Organizational Factors**

- a. Lac of procedural and distributive justice
- b. Agency problem
- c. Lack of employment
- d. Rigidity and autocratic behaviour of leadership

**Strategies for Preventing and Reversing Brain Drain:**

Finally in the following lines there are some suggestions in the form of strategies that should be

adopted to prevent and reverse the brain drain of Pakistan.

**i. Linking Development With the Availability of Matching Skilled Workforce.** The issue of Brain Drain can be greatly overcome by following the golden rule of Human Resource Management, "Right person for the right Job". Hence, the development of the organizations and country shall be associated with the matching skills of workforce.

**ii. Economic Development:** long term measures of economic development should be taken that shall create employment opportunities on one hand and economic spread effect on the other.

**iii. Improving Work Place Environment** of the organizations through viable legislations.

**iv. Improving Law and Order Situation and Overall Stability in the Country:** This would promote a sense of security among the highly skilled labour in the country such as doctors, engineers, scientists and academicians. Resultantly they will not flee to other countries.

**v. Managing Work Place Diversity With Organizational Justice:** As brains can be from diverse cultures and ethnic background working in organizations, hence, organization policy shall be to distribute justice by affirmative actions. In this regard concrete measures should be taken by the management to implement organizational justice in the organizations.

**vi. Nationalism:** Above all a sense of Patriotism and Nationalism shall be promoted in the society on all levels adopting the Chinese, Indian models. Government can play its due role through chalking out a national policy.

**vii. Organizational Loyalty and Commitment:** Unless employees are not committed to their organizations a sense of loyalty cannot be incited. That would discourage the employees to leave their organizations and resultantly, their intention to leave the country.

**viii. Socio-Culture Environment of Open Type** where people from any colour, religion, belief culture, ethnicity, race or language should not feel discrimination. As Pakistan is a multi-ethnic society where people from different cast and creed live. Hence, on aggregate the environment should be opened having the potential and capacity to accept the people from different cultural and ethnic background. Here, the USA model can be followed to overcome that issue.

**ix. Utilizing The Option of TOKTEN:**

Pakistan being the member of United Nations Organization (UNO) should take benefit from the *Transfer of Knowledge Through Expatriate*

*Nationals (TOKTEN)*, a development Program initiated by UNDP in 2007 to facilitate the return of technical and professional migrants which can lead to prevent and reverse Brain Drain.

**x. Using GATS For Services:**

Pakistan can utilize the expertise and skills of Pakistani Diaspora through benefiting General Agreement for Trade in Services (GATS). GATS (WTO secretariat) legitimize the services such as higher education, banking, finance, insurance, architecture, fashion designing etc to trade among the member countries. Following are some mode of supplies in GATS that can provide a base for policy makings for the government to involve Pakistani Diaspora in countries economic development.

**a. Consumption Abroad:**

This mode of supply entails that consumers can travel to the supplier country to avail the service. Government of Pakistan can get maximum benefit of this provision by arranging some training centers or off-shore branches of institutes in the host countries to attract the students. Here government should keep in mind the standards and criteria prevail in those countries. This strategy would benefit government by utilizing the expertise of Pakistani teaching professionals working in host country. Besides, a substantial amount foreign exchange can also be attracted via this mode.

**b. Cross Border Supply:**

This mode of supply can help the government by taking advantage of technical and professional expertise of overseas Pakistanis settled abroad in multi ways. Here the physical movement of the supplier is not necessary; instead, the service can flow between the member countries. Government can establish universities, educational institutions and even hospitals by engaging professionals, academicians, researchers and scientists etc via this method to provide better facilities in the described fields without their physical movement to the country of service supply.

**c. Commercial Supply Branches:**

It is another clause of the article of GATS which entails that satellite branches or franchise of the business can also be open to other countries of the world. Here, Government can exploit this opportunity by opening offshore branches of the main businesses that would help those Pakistani professional who want to contribute to their countries. Training centers, universities, franchising of different service providing firms or institutions are some options.

**d. Presence of Natural Persons:**

GAT has the provision of allowing service providers to temporarily visit to other countries. By utilizing such opportunities government may provide the facilities to Pakistani professionals residing

abroad to pay visits to their home country in a year. Such visits can be arranged in such a way that may not disturb their routine commitments over there.

#### xi. Re-Establishing National Talent Pool (NTP):

NTP is a good effort by the Government of Pakistan however; the need is to implement their plan in true letter and spirit, without any political interference. Besides, it has to establish a close link with the academic institutions like, medical colleges, engineering universities, chartered accountancy firms. After completion of their degrees in respective field it should be the responsibility of NTP engage every passed out in a developmental, constructive or research oriented project (s). This would discourage the irregular outflow of Brain to a great extent. Moreover, Government should allocate a special budget, under the umbrella of NTP, for the sake of research activities in fields of imperative nature, such as social and natural sciences.

#### xii. More and More Networking:

Chinese and Indian Model of Brain Circulation clearly entail the networking of diasporas with home country. Hence, the expertise of Pakistani Diaspora may efficiently utilize via a strong network ranging from diplomatic to student level. In this regard, Ministry of Foreign Affairs may play a vital role.

#### Conclusion:

In the prevailing Global scenario of competition, it would not be a wise move to solely focus on reversing and discouraging the Brain Drain. As human resource can be more productive and developed by exposing to continuous training and learning which can only possible if we let a specific portion of our brain to developed countries for the sake of more skills and knowledge. However, government should fulfill its utmost priority to attract and engage that Brain by providing congenial atmosphere to help and support that Brain to contribute its share in the National Economy.

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