

## **CHAPTER III**

### **THE EMERGENCE OF REVERSE BRAIN DRAIN PHENOMENON**

This chapter will explain what reverse brain drain phenomenon is, especially in India. Furthermore, the writer will divide the topic into two parts, the first part will discuss the reverse brain drain phenomenon in general and the second part will discuss the reverse brain drain phenomenon in India and the steps and methods used by the government of India to make reverse brain drain phenomenon happened.

#### **A. Reverse Brain Drain Phenomenon in General**

In contrast with brain drain phenomenon, where the people migrated from the developing countries to the developed countries to seek for better living conditions, reverse brain drain in general defined as the type of brain drain where the highly educated people decide to move in reverse from the developed countries to the developing countries that currently develop rapidly. Furthermore, the skilled migrants who were migrated to the U.S are deciding to return to their home country after the several years of experience in there. They try to implement their experience by actively participate to develop their home country. This phenomenon can be happened by two reasons, individual decision and the government decision.

The reverse brain drain phenomenon can occur depends on how the willingness of the country to attract the highly skilled people to return home by creating a strategy and planning over a long period of time. The countries that are ready to attract those people will try to develop their migration policies and provide a suitable environment for the skilled migrant (Arp, Hutchings, & Smith, 2013).

Usually, the reverse brain drain phenomenon happened in the developing countries that have been suffered from the impact of the brain drain. Those countries already aware of the further impact if they were not immediately looking for

solutions and planning to prevent it. Therefore, the role of government is needed to implement several policies to prevent more damage to the country from the brain drain phenomenon.

Reverse drain phenomenon also could occur through the individual itself. Since the early of 20<sup>th</sup> century, the highly skilled immigrant starting to leave the U.S and return to their home country. There are the positive and negative reasons that encourage it. The positive reason consists of several factors like the closeness to the relatives, the cultural approach and the development of technology and economy in their home country. While the negative reason mainly because the fact that there is a policy that keeps approximately 500,000 highly skilled immigrants who were work in the U.S got a little opportunity to advance in their jobs or change the jobs (Wadhwa, 2009, p. 45).

According to Mohammed Bin Rashid Al-Maktoum (How to reverse the brain drain, 2014), the Vice president and the Prime Minister of the United Arab Emirates, there are 2 (two) main components to make reverse brain drain phenomenon to be held successfully. The first component is the opportunity. If the countries want to attract those skilled migrants, the countries should create a suitable environment for economic growth. The suitable environment for economic growth is the condition where the countries could attract the foreign investment to their country to give their citizens an opportunity to enterprise and raise their competitiveness.

Second, the quality of life is important for them. In the past, many talented people choose to leave their home country to seek for a better amount of wages, job opportunity and facility, especially the education system. Despite how hard the obstacles to migrate are. However, today, the standards of living in some developing countries are increased. It is shown that by reversing the brain, the countries could create a better living condition for the citizens.

In addition, despite two components above, the best solution to make the reverse brain drain phenomenon success is by having a good governance that can create a better job opportunity and economic development (Maktoum, 2014). It

can be concluded that the role of government is important. The government could offer some benefits for those skilled NRIs to attract them to return to their origin country.

India became the first country in the world where the reverse brain drain phenomenon occurred. This phenomenon mainly caused from the disappointment of India's government towards the young generation who took an opportunity to study in the U.S choose to stay and work in the Silicon Valley, rather than return to their home country (Chacko, 2007).

### **B. Reverse Brain Drain Phenomenon in India and the Solution Offered by the Government of India**

As stated above, India became the first country where reverse brain drain phenomenon happened. Despite the disappointment of the government, there are many other supporting reasons behind it. The first reason was from March 11, 2000 until October 9, 2002, there is an incident called dot-com bubble or dot-com burst, where many internet-based companies were forcedly shut down due to an excessive growth in the usage and adaptation of the internet. This incident resulted in many talented ITs from India lose their job and choose to return to their home county (Chacko, 2007).

The second reason, post the 9/11 incident in the U.S, many immigrants from India face the discrimination from the western people because they were often get mistakenly recognize as Arabs immigrant. Therefore, many NRIs feels insecure if they remain to stay in the U.S.

And the last reason, many India's skilled migrant, usually the first generation of brain drain phenomenon who already spent more than 10 years in the U.S, prefer to return and stay close within their relatives. Therefore, they looked for job opportunity in India (Chacko, 2007).

In the late 1970s to the early 1980s, there is an early awareness in India because of brain drain phenomenon (Chacko, 2007, p. 131). From the brain drain phenomenon, India loss many of their skilled people to the U.S. Moreover, at that time, those people decided to stay permanently in the U.S

rather than returned to India and take a contribution to develop their country. It leads to the disappointment of India's government. The government believes that brain drain phenomenon bring more harm than good for India. Also, the existence of those skilled people in the home country is the missing puzzle pieces for the development in India rather than the highest amount of remittances that they received.

According to Nasscom and Mc Kinsey report in 2015 (Chacko, 2007, p. 134), it estimated that only 25,000 of IT professionals who returned to India between 2000-2004. If we compare the number of skilled people who returned to the number of people who migrated, it considered to be less than 3% from the number of people who migrated from India. Hence, the government of India plans to attract more skilled NRIs to return from the U.S to India.

To increase the number of the professionals to return to India, the government established the industrial, financial and commercial hubs in the cities of Mumbai, Kolkata, Delhi, Chennai, Bangalore, and Hyderabad who were left behind and change their status into modern metropolitan cities. This establishment created an opportunity for the skilled migrant to return to India and took the advantages to form it. In additions, there are also some skilled migrant in the first generation of the brain drain phenomenon, established the start-up company using their work experience, entrepreneur skill, and the global networks. Their company mostly about technology, research & development, and economic business sectors (Chacko, 2007).

As the number of the skilled migrants who returns to India increased, there are two cities that gained a recognition as the leading centers for the high-tech industries and services. They are Bangalore, the capital city of the Indian State of Karnataka and Hyderabad, the capital city of the Indian State of Telangana and Andhra Pradesh (de jure). Because of that, these two cities became the top destination for the IT professionals who were migrated to the U.S before (Chacko, 2007).

Cited from the official website of Ministry of Communication & Information Technology of the Government

of India in (Chacko, 2007, p. 137) that in Bangalore, since the development of the first Software Technology Parks of India (STPI) was established in the early of 1990s, there has been a distribution of technology parks in the urban centers across India. The role of STPI is like the export processing zones. They provide an infrastructure and tax exemptions to the software company that established in there for 5 years.

In the beginning, the STPI are part of the government enterprise. Then the STPI has evolved became the partnership business between the government and the national and international IT company. In 2006, it recorded there were 47 STPI units located across the country.

The STPI in Bangalore was built in the suburb area of the city, where there are a lot of empty lands. It was built in the 330 landscaped acres of land. These STPs facilitate with houses with electricity, art facilities, telecommunications, and computer software and services companies. The IT companies that established in there such as Motorola, Siemens, and Indian giant IT companies, Infosys and Wipro (Chacko, 2007, p. 137).

Meanwhile, in Hyderabad, most of the development has taken place in the northwest area, in the city of Madhapur, Gachibowli, Nanakramguda, and Vatingunapally. There was established Hyderabad Information Technology Engineering Consultancy City (HITEC) City, is the famous campus of information technology, engineering, health and bioinformatics in Hyderabad by the firm Larsen and Toubro along with the Andhra Pradesh Industrial Infrastructure Corporation Ltd. (APIIC). It designed to showcase the IT sectors of Hyderabad (Chacko, 2007).

In additions for the development in Hyderabad, the AP government allocated 5,000 acres lands around the HITEC City to build Cyberabad. In Cyberabad, it planned for the establishment of the national and international IT companies such as Satyam, Infosys, Wipro, Polaris, CSC, Oracle, Google, Microsoft and IBM offices. This area also contains houses and apartments to accommodate the people in HITEC City.

Moreover, the government planned that both Bangalore and Hyderabad will have new international airports that were built with the public and private partnerships in the next 5 years. This airport located in 30 km outside the Bangalore with an initial projected passenger capacity of 4,5 million per year. The government hopes that through the establishment of new airports in the central of Hyderabad, it would make the cargo and transshipment sector to the southeast Asian countries region to be easier (Chacko, 2007).

Furthermore, in the Education sector, since 2006-2007 the government of India under the Ministry of Overseas Indian Affairs (MOIA) launched a program called “Scholarship Programme for Diaspora Children” (SPDC) devoted to the Persons of India Origin (PIOs) and Non-Resident Indians (NRIs) from 40 selected countries (table 3 3.1) to attract and accommodate them to pursue the higher education in India. This scholarship provided to 100 (hundred) selected students with the distribution of 50 (fifty) seats for PIOs candidates and 50 (fifty) seats for NRIs candidates. However, if there are no suitable PIOs candidates the remaining seats can be offered to the other candidates and conversely. The selected students are awarded with US\$ 4000 of scholarship amount for payment of tuition fee, admission fee and post admission services for under graduate courses (Ministry of External Affairs Government of India, n.d.).

*Table 3 3.1 List of Selected Countries for SPDC Applicants*

LIST OF COUNTRIES			
No.	Name of The Country	No.	Name of The Country
1.	Australia	21.	New Zealand
2.	Bahrain	22.	Nigeria
3.	Canada	23.	Oman
4.	Fiji	24.	Philippines
5.	France	25.	Portugal
6.	Germany	26.	Qatar
7.	Guyana	27.	Reunion Island
8.	Hong Kong, China	28.	Saudi Arabia
9.	Indonesia	29.	Singapore
10.	Israel	30.	South Africa
11.	Italy	31.	Spain
12.	Jamaica	32.	Sri Lanka
13.	Kenya	33.	Surinam

14.	Kuwait	34.	Tanzania
15.	Madagascar	35.	Thailand
16.	Malaysia	36.	Trinidad and Tobago
17.	Mauritius	37.	U.A.E.
18.	Mozambique	38.	U.K.
19.	Myanmar	39.	U.S.
20.	Netherlands	40.	Yemen

The requirements to apply this scholarship program are:

1. The applicant must be in the age group of 17 to 21 years to be able to apply for this scholarship.
2. The applicant must be a PIOs and NRIs from the countries listed in table 3 3.1.
3. At least had 3 (three) years of education experience in foreign countries during the last 6 (six) years and passed the 11<sup>th</sup> and 12<sup>th</sup> examination in the countries listed in table 3 3.1.

Besides the requirements above, the applicants must pass these following academic qualification:

1. To join the qualifying examination, the candidates must have passed the senior secondary or equivalent grade examination from a system of education that recognized by the Association of India Universities (AIU).
2. The candidates must have studied the basic essential subjects at the qualifying subjects.
3. The minimum score that the candidates must reach in the qualifying examination is 60% (sixty percent) in all of the subjects.