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Brain Drain: Boon or Curse for the Economic Development

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ABSTRACT: Brain drain as it clearly means migration of educated or talented people from one country to another. In this case study the importance is given to understand the effect of Brain Drain on the development of the nation. The developed countries, by attracting scarce skilled labour, were widely held to be pursuing policies that were costly to developing countries, both in the short and longer run. It is one of the most relevant topic ever to analyse the effect of brain drain in the development. For that the hypothesis raised is Brain drain has terrible consequences on the development of the nation. Data collection is done from the emigrants. The collected data is analysed and used for hypothesis testing. According to the hypothesis testing conclusion is obtained.

KEYWORDS: Brain drain.

I. INTRODUCTION

Brain drain is all about losing the Indian talent for global market. It is about Indians leaving for abroad for greener pastures and career prospects. The tendency to go abroad is strong among Indian youth presently. We find many Indian youth leaving for developed countries especially for US, UK, Australia and other advanced countries currently.

There are several reasons why Indian youth leave for developed countries. They leave India due to lack of opportunities at home. They also leave for leading better and comfortable life there. There is also feeling that there is no recognition at home. In addition, developed countries need Indian talent as Indians are good at technical knowledge and skills. Developed countries also prefer Indian talent due to low cost as it helps them bring their cost of production and enhance their competitiveness. We find innumerable reasons for brain drain. But when we look at Indian perspective, government spends lot of money to educate students and if these students go abroad their education and expertise is not useful to our country.

Brain drain is both a boon and bane for country. It is not only in India but we find youth from several developing countries settling down in developed countries for leading better life. Since Indian population is high and Indian youth population is higher the number the issue appears to be exaggerated presently. When we look at from other perspective, the Indian youth send lot of foreign exchange to India and that helps our country immensely. In addition, if these youth come back to India after acquiring knowledge, skills and abilities they can add value to India. This process is known as reverse brain drain. The need of the hour is to encourage reverse brain drain so that India can make use of their tremendous potential, experience and expertise for building a stronger nation. This helps India becoming a developed country very soon and also a global Super Power in the long run.

II. RELATED WORK

The literature survey included the journals The Brain Drain- [1]A Survey of the Literature by Pierpaolo Giannoccolo and [2]Brain drain Problem: A Review Dr.Mohammad Reza Iravani. Alan Winters(university of SUSSEX). The [1] paper deals with the theoretical and empirical literature on Brain Drain and propose an ideal path that links the first studies with the most recent ones. In this development, the literature on brain drain focuses on a variety of economic and social issues and recalls to national and international debates. The [2] says that Brain drain or human capital flight is a large emigration of individuals with technical skills or knowledge, normally due to conflict, lack of opportunity, political instability, or health risks. A brain drain is usually regarded as an economic cost, since emigrants usually take with them the fraction of value of their training sponsored by the government. All these are



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explained below.

[1] Survey reviews the theoretical and empirical literature on the Brain Drain. This literature starts in the 1950s and focuses on different economic and social topics: International Migration, Human Capital, Population, International Commerce, Growth, Low Developing Countries, etc. Furthermore, these brain drain's studies recall often to national and international debates: the role of the International Institutions and Organizations, the illegal migrations, the Human Rights, the Ethnical discrimination, the different USA's migration policies, the post war problems, the illegal migration from Mexico to the USA, the specific tax reforms in USA, the Gorbachev's Age, the collapse of the Soviet block the Chinese policies, etc.

[2] Migration of people as a phenomenon differs from country to country and from time to time It is misleading to generalize about the possible effects of migration from developing countries. The phenomenon of migration of high quality manpower can justify the use of the expression on the term "brain drain", but one has to be cautious in using the expression drain indiscriminately. The developed nations concerned saves her pounds and dollars on professional education and training and in the process obtains the services of trained doctors/ engineers who/earn very much more than their native counter parts and have more comfortable styles of living.

III. METHODOLOGY

Research is an academic activity and as such the term should be used in a technical sense. The research design refers to the overall strategy that you choose to integrate the different components of the study in a coherent and logical way, thereby, ensuring you will effectively address the research problem.

The task of data collection begins after a research problem has been defined and research design/ plan chalked out. While deciding about the method of data collection to be used for the study, the researcher should keep in mind two types of data viz., primary and secondary. For this case study multiple choice questionnaire method is used as primary data. The sample area is taken as the emigrants. So the samples are taken from different people works outside India. The sample size should neither be excessively large, nor too small. It should be optimum. In this case study the sample size is 100.Ten Questions are prepared for questionnaire is shown in figure 1.

QUESTIONNAIRE
Brain Drain: Boon or Curse

I Ajmi Noushad, studying first semester M.Tech in IIT Bombay college of Engineering and Technology, Muvattupuzha, currently doing my case study work on Brain Drain: Boon or Curse. The following questionnaire is administered by me as a part of my study requirements and I assure you that the information provided by you will be kept confidential. Kindly co-operate with me and be honest with your answer.

(signature)

1. Brain drain has terrible consequence on the economic development of the nation.
Definitely Maybe Definitely not
2. Do you believe that your country suffers from the immigration of highly skilled and educated people (Brain Drain)?
Definitely Maybe Definitely not
3. Better payment and lifestyle makes Brain Drain more likely.
Definitely Maybe Definitely not
4. The money the emigrants have sent back home has helped in alleviating poverty in their homes.
Definitely Maybe Definitely not
5. High-skilled workers remit, invest and share knowledge back home.
Definitely Maybe Definitely not
6. Higher cutoff marks for admission is the main cause of brain drain.
Definitely Maybe Definitely not
7. Brain Drain results a higher rate of people starting capital intensive enterprises.
Definitely Maybe Definitely not
8. Do you think embarrassment of doing low-grade jobs in native country is the main cause of Brain drain?
Definitely Maybe Definitely not
9. Brain drain removes feeling of patriotism.
Definitely Maybe Definitely not
10. Government investments in higher education is lost due to highly educated person leaves the country.
Definitely Maybe Definitely not

Suggestions:

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Figure 1: Questionnaire

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IV. ANALYSIS AND RESULTS

After collection, the data has to be processed and analysed in accordance with the outline laid down for the purpose at the time of developing the research plan. Data processing includes editing, coding, classification and tabulation of data. Analysis, particularly in case of survey or experimental data, involves estimating the values of unknown parameters of the population and testing of hypotheses for drawing inferences. Analysis of data collected by the questionnaire shows that the respondents were happy to participate in the case study and almost all of them answered all the questions. The survey details are shown in the Table 1 as percentage. In below table contain a Column Q.No to represent the question number given in questionnaire.

Q. No	Definitely (In %)	Maybe (In %)	Not definitely (In %)
1	50	8	42
2	72	13	15
3	72	9	19
4	50	8	42
5	40	7	53
6	35	9	56
7	43	7	50
8	70	8	22
9	41	7	52
10	71	4	25

Table 1: Survey details

Here Chi- square test is used for hypothesis testing. A chi-squared test can be used to attempt rejection of the null hypothesis that the data are independent. The chi- square test is always testing what scientists call the null hypothesis, which states that there is no significant difference between the expected and observed result.

The equation for Chi- square testing is given below:

$$\chi^2 = \sum \frac{(O_{ij} - E_{ij})^2}{E_{ij}}$$

Where,

O_{ij} =observed frequency of the cell in ith row and jth column.

E_{ij} =Expected frequency of the cell in ith row and jth column.

Here, testing of my hypothesis is going to be conducted.

H_0 : Brain Drain has good impact on the development of the nation.

H_1 : Brain drain has terrible consequences on the development of the nation.

The questions 1 and 2 are used for Chi- square test. Contingency table prepared for Chi- square testing is show in below as Table 2.

Sample	Agree	Disagree	Neutral	Total
Q.No 1	$O_{11}=50$ $E_{11}=61$	$O_{12}=8$ $E_{12}=10.5$	$O_{13}=42$ $E_{13}=28.5$	100
Q.No 2	$O_{21}=72$ $E_{21}=61$	$O_{22}=13$ $E_{22}=10.5$	$O_{23}=15$ $E_{23}=28.5$	100
Total	122	21	57	200

Table 2: Test Data

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And Chi- square values are calculated from this Table 2 is also given below:

χ^2
1.9836
0.59524
6.394737
1.9836
0.59524
6.394737
Total=17.947

Here degree of freedom = $(3-1)(2-1) = 2$

At 2 degree of freedom and 5 percentage level of significance, the critical value is 5.991 and calculated value is 17.947. The calculated value 17.947 much greater than critical value, so I am rejecting the H_0 hypothesis, it states that Brain drain has good impact on the development of the nation. Therefore Accepting the H_1 (alternative hypothesis): Brain drain has terrible consequences on the development of the nation.

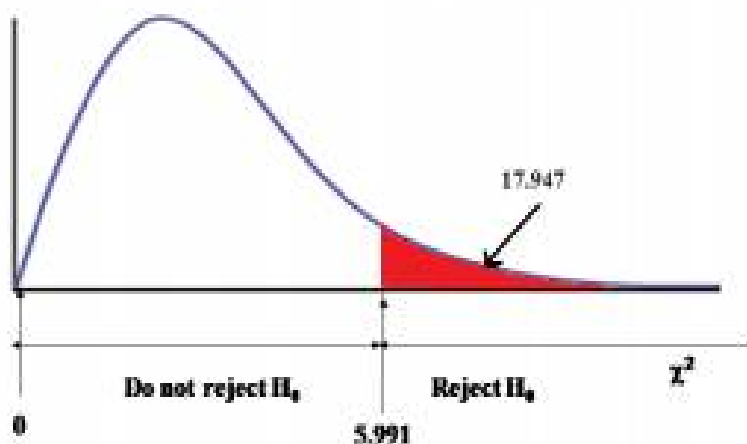


Figure 2: χ^2 test with degree of freedom 2

V. CONCLUSION AND FUTURE WORK

In this case study it is found that Brain drain has terrible consequences on the development of the nation. Brain drain is all about losing the Indian talent for global market. It is about Indians leaving for abroad for greener pastures and career prospects. They leave India due to lack of opportunities at home. They also leave for leading better and comfortable life there.

Brain drain is both a boon and bane for country. It is not only in India but we find youth from several developing countries settling down in developed countries for leading better life. Since Indian population is high and Indian youth population is higher the number the issue appears to be exaggerated presently.

When we look at from other perspective, the Indian youth send lot of foreign exchange to India and that helps our country immensely. In addition, if these youth come back to India after acquiring knowledge, skills and abilities they can add value to India. This process is known as reverse brain drain. The need of the hour is to encourage reverse brain drain so that India can make use of their tremendous potential, experience and expertise for building a stronger nation. This helps India becoming a developed country very soon and also a global Super Power in the long run.

Future work concerns deeper analysis of the subject, new proposals or view points to it. It can be conducted for a large population. The respondents in this case study is restricted to people who works in foreign countries. You can



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consider different people works in our own country and other developing countries. The data may collect also through the online questionnaire. To increase the sampling area the online questionnaires can be send to the students and teachers all over to know their opinion.

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BIOGRAPHY

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