

An Analysis of Brain Drain in Kendua Upazila and Losing the Nation's vital Potentiality

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Abstract: The research is completed in the context of the most vital topics in recent times. This study assesses the impact of the nation's vital potential being lost due to brain drain. For this study, the broad objective was to describe and explore the reasons behind the departure of talented and skilled people in Kendua Upazila of Netrakona District. This study provides academic and popular literature to inform the reader. Qualitative and quantitative methods of data are used together in this study. Data collection methods include; Interviews, questionnaires and secondary data analysis. This study involved a sample of 25 respondents. The literature on brain drain and its implications is critically reviewed. Through this research, an attempt has been made to show that leaving talented people has an impact on the family, society, and the state, as a result of which the developments in Kendua Upazila have been somewhat slow. This study found that the extent to which intellectual brain drain an area partially reflects the impact on a state. Conclusions are drawn and some possible recommendations are made such as: development of education system, introduction of various scholarships, and social awareness work on brain drain.

Keywords: *Brain Drain, Human Capital, Skill migration, Brain calculation, Educational facilities, political stability, Living conditions, Youth Aspiration, Human development index, Sectoral gaps.*

Cite this Article

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Introduction

The migration of properly skilled and educated persons from one country to another country is called brain drain. Presently this is a significant burden for Bangladesh. This issue shows many professionals, including doctors, engineers, and academics, leaving the country in search of better career opportunities, improved living conditions, and more stable environments. For research and innovation drives the brain drain in Bangladesh by factors such as limited job opportunities, political instability, and inadequate support. This loss of talent is the main hampers of our development as well the economic growth additionally potential for progress. So, meaning of the brain drain requires constructive polices to emphasizes domestic opportunities and make a good environment that can retain and attract skilled individuals.

Recently, brain drain is reflecting a complex interplay of socio-economic and political issues. This issue of brain drain has emerged as a concern for Bangladesh. Leaving their own country to find better opportunities is an important challenge for the development and progress of Bangladesh. This issue is particularly relevant for economic development, social justice and political stability. Understanding the dynamics of brain drain requires study of historical, economic and social context. As well as its implications for the country's future, to understand the current brain drain situation in Bangladesh it is important to consider the historical background that has contributed to these problems. In 1971, the country has faced various challenges, which have eroded

public confidence in the domestic system since Bangladesh's independence. This issue has created an environment where skilled professionals and young talents perceive a lack of adequate opportunities for personal and professional growth. Economic prosperity is a primary cause of brain drain. The disparity between the wages paid in Bangladesh and the higher wages paid in developed countries largely forces talented youth to migrate from one country to another. In particular, areas such as information technology, engineering, medicine and academia have seen significant migration of talent. This trend is exacerbated by relatively low salaries and limited career advancement opportunities in Bangladesh. Education plays a significant role in brain drain. Although Bangladesh has made significant developed in improving educational access and quality, there are still considerable gaps in higher education and research. Many postgraduates find that local universities and research institutes lack the necessary resources for cutting-edge work and opportunities for international collaboration. As a result, highly educated people often look to countries with advanced education systems and research environments where they can advance their careers and potentially contribute to innovation. Political instability and problems of good governance also hinder the brain drain. Frequent changes of government, political corruption and poor governance have created an environment of uncertainty. This instability erodes the self-confidence of professionals and academics, leading them to seek stability and better prospects, such as greater potential and good governance. Moreover, problems

such as inadequate public services, including social health care and security, force people to leave their home countries. Because, a better quality of life and access to higher facilities increase people's desire to leave the country. These facilities include healthcare, education and social facilities. Due to which the negative attitude of people towards the services of the country is seen and the desire to go abroad arises.

Background of the study

Brain drain has become a problem which is a permanent problem for Bangladesh. The term summarizes intellectual capital and talented professional loss that can contribute to the growth and development of a nation. Understanding the background of brain drain in Bangladesh requires examining the socio-economic, political and educational contexts of the country over time. Bangladesh has undergone significant changes since independence in 1971. Among which socio-economic changes are significant. Initially, the country faced many challenges including widespread poverty, political instability and fragile infrastructure. In recent years, there has been a significant outflow of educated professionals, driven primarily by the need for improved economic opportunities and political stability. The reasons behind people's emigration were influenced by the desire for a better life and better career prospects, which were not adequately met within the home country. Bangladesh's economic system has seen significant growth in recent times, especially in sectors such as textiles and garments. Despite these achievements, Bangladesh's economy still struggles with issues such as income inequality, inadequate research and development, and underdeveloped industries in the high-tech sector. This economic landscape often fails to match the expectations of properly skilled professionals who seek competitive salaries, better working opportunities, and more substantial career advancement opportunities. The disagreement between the economic rewards available domestically and those offered in developed countries has been an important driver of brain drain. The skilled of higher education and research facilities in Bangladesh has been a contributing cause to the brain drain issues. While the country has made progress in growing access to education, the higher education sector often lacks the resources and infrastructure required for advanced research and professional development. Political opacity and governance issues have also played an important role in brain drain. Weakness in the functioning of the government of Bangladesh, political instability, corruption, lack of accountability of those in central positions are contributing factors behind brain drain. This kind of political instability creates an uncertainty among the people of a country, which makes it difficult for various skilled people to work in the country. The emigration of skilled professionals contributes to human capital shortages, which hinder progress in key sectors such as technology, healthcare and education. This deficit affects the country's ability to innovate, improve public services and drive economic growth. Repatriated financial assistance to those who have emigrated is a significant source of foreign exchange and supports families in Bangladesh. The context of brain drain in Bangladesh is rooted in a complex interplay of historical, economic, educational and political factors. Although the country has made progress in economic development and educational access, significant challenges remain. Understanding these issues is crucial for developing effective strategies to mitigate brain drain

and harness the potential of Bangladesh's skilled professionals for national development. It is now imperative to address these factors behind brain drain.

Significance of the Study

Research on the issue of brain drain in Bangladesh is highly significant for a number of reasons. Understanding and addressing brain drain is essential for socio-economic progress, policy construction and strategic planning of a nation. One of the primary reasons for studying brain drain is to assess its economic impact. Brain drain often results in the loss of human capital, which can have direct and indirect effects on economic growth. By exploring the magnitude and nature of this impact, policymakers and economists can better understand how the emigration of skilled professionals affects different sectors of the economy. This includes assessment of skill loss in critical industries, innovation potential and overall productivity. A thorough study of brain drain can provide valuable data and insights that inform policy formulation and implementation. By selecting the root causes of brain drain whether they are economic, educational, political, or social policymakers can develop targeted interventions. This might involve reforms in higher education, improvements in job opportunities, or enhancements in political stability and governance. Understanding brain drain issues can highlight deficiencies in the educational and research sectors. By identifying the causes driving skilled professionals abroad, stakeholders can pinpoint areas where educational institutions and research facilities need improvement. For businesses and industries, brain drain can create gaps in expertise and leadership. A study of this issue helps organizations understand the implications of losing skilled professionals and can guide them in strategic human resource planning. Brain drain also has significant social implications. The emigration of skilled peoples can affect community development and social structures. By exploring these effects, I have tried to highlight how the losses caused by the departure of skilled and talented people affect local communities, families, and societies. Many people want to return to their country, but face various obstacles. For which they never come back. So understanding the reasons behind this can serve as an effective strategy. For which some initiatives can be taken. For example: giving various incentives, providing support, ensuring proper respect for their skill and talent. These strategies can contribute to the development of the country by reducing the brain drain trend.

Problem statement

The problem of brain drain has penetrated the world faster and more deeply than any other problem since World War I. Despite the fear of brain drain, very few government policies have been adopted to stop brain drain in less developed countries and they have not reached any legal level.

Brain drain has become one of the major concerns for developing countries for sustainable economic development. Human resource mobility is very common in the era of globalization, but the consequences of brain drain are certainly noticeable. Therefore, the government should take proactive steps to address this challenge and identify the root problems of brain drain and provide appropriate solutions that will enable people to share their

knowledge, skills and innovative power and thereby increase the economic development of the country.

Following research questions need to be addressed:

- ✓ What are the major issues of brain drain in our country?
- ✓ How to classify the problem for easier identification and modeling?
- ✓ Are migrate people facing any criminal offence after brain drain?
- ✓ What to do for declining the negative impact of brain drain?

Aim & Objective of the studies

Brain drain should be considered as an important issue and focus on government policies, administration and strategic planning of human resources. This research paper provides several objectives:

Main objective of the Study

For this study, the broad objective of the study is to describe and explore the impact of brain drain at Kendua Upzila in Netrokona district.

Specific objectives of the Study

1. To understand the causes of increase of the brain drain.
2. To know the impact of globalization on brain drain.
3. Analyzing the effectiveness of policies and strategies implemented to mitigate brain drain.

These objectives will help in creating an understanding of brain drain and taking effective action.

Theoretical framework

Push and pull factors:

According to Everette S. Lee, push and pull factors are a category that demographers use to analyze the movement of people from own areas to new host areas. Everette's model explains the causes of migration by dividing them into two groups. Namely: push and pull. This theory explains the movement of people from one country to another in terms of migration.

- Push Factors
- Pull Factors

Push Factors:

This factor forces people to move from their own country to other countries. Some of the causes are given below:

1. The work environment of one's country is not flourished enough.
2. Deterioration of financial condition of the country.
3. Want of adequate facilities in the field of proper education and research.
4. Existence of various types of discrimination in work in this area.

Pull Factors:

It does not force people to migrate from their own country to other countries but attracts them to other countries as the facilities of other countries are better than their own. These factors include:

- Attractive salary jobs in foreign countries.
- Good facilities in higher education and research.

Globalization theory

Peter Denis Sutherland (25 April 1946 – 7 January 2018), was an Irish businessman, barrister and father of globalization theory. He was known for holding various international organizations and business roles.

As a result of globalization people can easily move from one place to another. Due to which brain drain is happening in some regions. So, this theory of globalization is contributing to brain drain.

Development Economics

Sir Arthur Lewis played a special role in the theory of development economic. He was a famous economist. He is best known for his work in development economics. He received the Nobel Memorial Prize in Economics in 1979 for his work in development economics. His most popular work is the dual sector model of developmental economics, also known as the Lewis model.

This field examines how brain drain affects development economic, particularly in less developed countries, where it can exacerbate problems related to underdevelopment and inequality.

Profile of the study area

For conducting a research, it is very important to select area. For this research, my study area is Kendua which is located at Netrokona district. After collecting the data from there, I will make comparing its present conditions and future with probable challenge which will be raised.



Figure 1: Kendua Upazila

source: Google Map

Ethical issues

Ethical issues in research work not only protects the rights of the interviewee or community, but also creates a favorable environment for scientific inquiry to continue - **Hay Yin** said that a researcher must be more ethically transparent to conduct research. So I studied this research unbiased.

In this regard, I would protect all sources of information used for my research. During the fieldwork, I explained the aim of the study to the participants. To protect participants from injury and abuse, I used pseudonyms for participants in my research. And prior permission is obtained for recording.

Rationale of the study

Impact of Economic: To understand brain drain helps assess its impact on the economy of the host country. The departure of skilled professionals can guide to a loss of talent and innovation, affecting productivity and economic growth.

Brain Allocation: Analyzing the patterns and causes behind brain drain can help understand how talent is distributed globally. This information is vital for policy makers aiming to create an environment to retain skilled people.

Policy development: Insights from brain drain studies can guide policy making aimed at reducing the negative impact on host countries. These include improving local opportunities, increasing career prospects and creating incentives for professionals to stay.

Social and Educational Impact: The study can shed light on social and educational aspects, such as how the loss of professionals affects educational institutions and social services.

Global Competitiveness: To understand brain drain helps countries assess their global competitiveness and develop strategies to attract and retain talent, balancing the global distribution of skills.

Overall, the brain drain study provides a comprehensive view of its causes, consequences, and possible solutions, helping both source and destination countries address this complex problem. That is why the study is very relevant in the present times.

Limitations of the studies

Any research may have some limitations. Also, this study has some limitations. Here are some of the main limitations:

Inadequacy of statistics and data: Fully accurate data or statistics are not readily available at the local level. Sometimes national or international organizations do not collect local level data, which can affect research results.

Challenges in collecting primary data: Many young people who migrate abroad find it difficult to directly contact them or gather their views. The main reason is that there is some time difference between their country of residence and our country's time which makes their free time similar to our free time due to which it is not possible to talk to them well. For this reason, there may be some gaps in the data in the study.

Research is limited to a specific age group: Brain drain is often focused on young people, but the issue applies to people of all ages. As a result it can be difficult to understand the whole picture.

Social and Cultural Barriers: Many times individuals or families want to keep the fact of going abroad a secret for various reasons. Such confidentiality may limit research data collection.

Non-Cooperation of Local People: Many times local people or institutions do not show interest in research. As a result, lack of data can affect research.

Dependence on the international context: Many times, the international context (e.g., visa policies or immigration laws) about moving abroad changes, which affects brain drain tendencies. Such changes may also alter the results of the study.

These limitations can affect the scope and credibility of the research and create challenges in understanding the subject.

Literature Review

This chapter deals with the review of related studies. It is very important to review the study before identifying any research work so that the repetition of already done studies can be avoided. Moreover, the researcher gets a clear idea about various studies carried out in this area and various methodologies used by other researchers. So, for the better understanding of the conceptual issues of the research, review of the literature is needed. I have reviewed some of the related topic in order to get a clear view about the work and which are described below.

A study conducted by Abu Md Abdullah called "Brain drain: Economic and social sufferings for Bangladesh" published by Asian journal of Humanity, Art and Literature 1 (1), 9-17, 2014.

In this study author strongly focused on the demerits and those factors which are responsible for brain drain in Bangladesh. For example, this paper presents that all the highly educated, talented people of Bangladesh are leaving the country where a less developed country like Bangladesh needs more talent to lead the country to progress. But despite being aware of this, most of the talented or highly educated people are not returning home. It explores the sufferings of Bangladesh along with the reasons behind these. Bangladesh's areas of suffering include the health, education, science and technology sectors. This study was conducted with the aim of mitigating this suffering in Bangladesh.

Dr. Mohammad Reza Iravani, (Published: August, 2011). "Brain drain Problem: A Review"

This research paper explains the causes of human emigration in terms of brain drain or human capital flight and also highlights the government sponsorship behind it and its opposite. That is, instead of brain drain, it explains how to gain brain. Moreover, it focuses on how to uncover the right information about brain drain through various institutional debates on these issues.

Hillel Rapoport (Published by Journal of Economic Literature: 3, September 2012) "Globalization, Brain Drain, and Development"

This research paper mainly focuses on the recent economics of brain drain. Here it is shown that the level of brain drains, determinants that have become a major aspect of globalization. Another point noted in this study is that immigration of highly skilled people does not deplete the stock of human capital. Rather,

it tries to highlight the positive side. Here are some case studies showing the impact of brain drain.

Bhagwati and Jagdish (Published by International Social Science Journal, 1976), “The Brain Drain”

This article focuses on the flow of skilled manpower from less developed countries to developed countries with a focus on talent transfer. Examines the possible consequences of this flow and considers other factors involved. Here the author focuses on three issues that concern the consequences of high-level manpower outflows from LDCs on the economy. Second, few are able to express their concerns in international forums. Third, it registers a view of how this problem is solved by stopping the immigration problem.

Fazal Rizvi (Published by Asia Pacific Journal of Education, 2005), “Rethinking “brain drain” in the era of globalization”

This paper focuses on dynamics. The concept of brain drains deals with various issues in the context of current thinking. It argues that the traditional arguments we have about intelligence are not enough. The author here attempts to approach the issue from a postcolonial perspective dealing with issues of identity, national integration and cultural degradation. He studied at Australian and American universities based on interviews with students of India and China. This paper analyzes the ways in which globalization dilemmas relate to students' subjective and career aspiration.

Farhat Chowdhury (Published by United National University, 2018) “Brain Drain: Factors affecting student migration from Bangladesh”

This paper attempts to show the push-pull factors responsible for human capital flight. Where human capital contributes significantly to the development of a country. There the country's highly educated, skilled students are immigrating to give a better life, a better life for future generations. But there is not much focus here on the many other factors that account for this human capital flight. This matter has been shown in my research that in the case of brain drain, not only one reason should be given importance, the socio-economic context behind it should also be highlighted. Which is shown in my research work.

Methodology of the Study

Introduction

The methodology for an impact analysis of brain drain in Bangladesh would involve a systematic approach to gather data, analyze impacts, and draw conclusions. Here is a suggested methodology for conducting such an analysis.

Research Design

Research design is a conceptual structure within which research is conducted. It structures the steps required to answer the research questions of the study. There are different kinds of research design, such as exploratory, descriptive and causal or experimental (Kothari, 2004).



Methods and Techniques of data collection

A several of methods and techniques are used here that are important and accessible to this chapter. For example: observation, focus group discussion (FGD), interview, case study, questionnaire, sampling, Source of data collection (primary data and secondary source) etc.

A Qualitative and Quantitative Approach

To collect and examine data relevant to the research problems, the study will use a descriptive survey method. The goal of this approach is to collect data that can be compiled, displayed and analyzed for categorization. A research design is a framework necessary for efficient data collection and analysis (Bryman, 2008).

This study uses both qualitative and quantitative techniques to assess and understand the effects of brain drain on my research area. By facilitating interviews with different groups of respondents, these methods made it possible to collect different types of data. A cross-sectional approach with a combination of qualitative and quantitative methods proved suitable for data collection as per the objectives of the study.

The qualitative approach focuses on how brain drain affects the social, economic development of a country. The quantitative method was used to collect the number of respondents related to the specific research question and it enables the researcher to generalize the findings.

Sampling

There are many sampling methods what I could consider for collecting my data. Because the select of sampling method depends on several sampling factors such as the research objectives, available resources and the Pacific features of the population for collecting my data I was taking the help of mixed methods that help me to collect both types of data like qualitative and quantitative data. It's necessary to note that each sampling method has its strengths and limitations. The select of sampling method should classify with my research objectives, the availability of resources, and the feasibility of accessing the population of interest. Additionally, consider potential biases that may arise from each sampling method and how they could result the generalizability and validity of my findings.

Sampling size and area

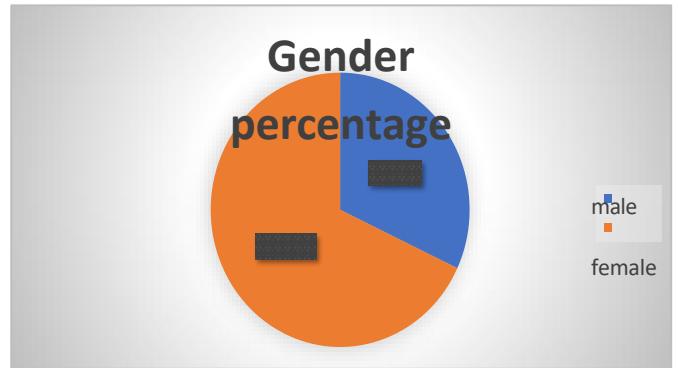
I collected almost 25 data sample from respondent using purposive and snowball sampling technique, these data represent the faces of brain drain in across the country. I selected my study area at Kendua in Natrokonka district. My represent was a wide range of

people such as teachers, doctors, engineers, different private job holder, universities students and others. The age limits of the participants was 18 to 32. So let's examine the sample's socio demographic breakdown.

<u>Age group</u>	<u>Number</u>
18-20	7
20-24	6
25-28	8
29-32	4
<u>Professional status</u>	<u>Number</u>
Employed	12
Unemployed	13
<u>Specific Profession</u>	<u>Number</u>
teachers	3
doctors	4
engineers	3
students	13
different private job holders	2

Table -1: socio- demographic Characterization of the sample

<u>Gender</u>	<u>Number</u>
Female	9
Male	16



Sampling Method

This study focuses on purposive and snowball sampling for the interview and questionnaire. These samplings are non-probability methods for selecting respondents with comparable features. The method is categorized the respondents purposely and utilized to record many perspectives, understandings, and experiences regarding how brain drain affects economic development in kendua upazila.

Data collection Techniques

Primary Data

Interview, key informant interview, case study and observation are the techniques for collecting data. To better comprehend the research problem and data collection, a qualitative and quantitative both research methods has been used in this research. But I more focused on qualitative methods.

Secondary data

Newspapers, journals, books, internet and publications connected to the topic were used to gather secondary data. The data and information have been verified and properly assessed from both the primary and secondary sources.

Observation

The environment, the people present and the significance of what was observed are all described using observational methods. Although most visits involve some form of direct interaction, they can also be conducted remotely using pictures, video files, or voice tapes if permission is obtained. Everyone is a spectator of life. The systematic way in which the observations made by qualitative researchers are organized distinguishes them from the general observations we make day after day. Observation is a type of research method in which the researcher places himself at a specific location to observe nearby activities. It involves systematic observation and analysis of surrounding phenomena.

Interview

To collect data, I used three different types of interviews. They are semi-structured interview, structured interview and unstructured interview. In-depth interviews rely on verbal exchanges between interviewers and respondents to elicit information. Those who are currently trying to expatriate and are out of the country. Because their qualifications are not properly evaluated in the country. To understand this topic better, I used these interviews. An interview guide, which consists of a prepared list of questions, topics or issues, can be used for both individual and group interviews. This

collection of questions was developed to help interviewers cover important topics and establish continuity between topics. Interviewers address the most important topics as the list is intended as a guide only. The list is intended merely as a guide, so any questions the interviewer feels will reveal information relevant to the goal and focus of the interview can ask. For this reason, it is called a semi-structured interview. And I used structured interviews to interview strangers and unstructured interviews to interview acquaintance.

Focus Group Discussion

Focus group discussions play a special role in exploring a particular area. I use two focus group discussions to facilitate my research. I sit down with some of my acquaintances and discuss the problem of brain drain. There, participants are asked about their opinions, views, beliefs, opinions and ideas. Focus group discussions can take many different forms, including the dual type (two-way discussion), mini FGDs (with 6 to 12 participants), and phone/web FGDs (with 6 to 8 participants), etc. FGD methods (dual and mini) have been used.

Key informant interviews

The main purpose of key informants is to provide information on various topics. To conduct my research, I have chosen a person who is the president of a student forum in my area. So almost all the news is available to him because he is always involved with these issues. His name is Maqbul Hossain. From him I got a lot of information about brain drain which was very important for conducting my research work.

Case Study

A case study is a way of showing a small sample to give an idea of the whole while collecting data on a wider scale. A case study is a thorough examination of a case. A social group in litigation that exhibits abnormal behavior. It is a qualitative analysis technique. It seeks to compile a thorough and in-depth account of social phenomena within a social unit, which may be an individual, family, neighborhood or event. This technique aims to collect data in a methodical and systematic way. Case studies can be carried out on groups, organizations, communities or enterprises in addition to individuals, who are the subjects of many of them. To strengthen the validity of the research, case studies are used. 4 case studies are included in this study based on their involvement and subject knowledge.

Data Collection Tools

Tools like audio recording, camera, laptop, mail, pencil, eraser, diary etc. helped me to collect data for my research while I was in the field. Additionally, a questionnaire was created.

Method of Data Collection

Discussions were held with their consent and at a time and date that suited their schedules, without revealing any information about their ethical positions. All lectures were given in Bengali to facilitate the participants to express themselves.

Data Analysis

Data were handled using qualitative techniques as this study adopted a qualitative approach. This information was written using

research materials such as a notebook and a pen. I have tried to arrange them according to study concepts and objectives with the help of Microsoft Word.

Data Presentation

In short, information is provided in written form.

Socio-Economic Overview of Kendua Upazila

Introduction

Kendua Upazila is located in the Netrokona District of Bangladesh. It offers a distinctive socio-economic landscape that is essential to understand for my research on brain drain. Here's an overview.

Demographic profile

Population: Approximately 300,000 people (latest estimates may vary). But I took information from 25 respondents for my research.

Age Distribution: Predominantly young population has a high proportion. In which the age group of working or students can be seen.

The age distribution of the 25 respondents were as follows:

Age	Frequency	Percentage
18-20	7	28%
20-24	6	24%
25-28	8	32%
29-35	4	16%

Table -1: Distribution of respondents by age

From the above table-1, it has been found that most of the respondents (28%) fall in the age group 18-20 and (24%) fall in the age group 20-24. And then 32% fall in the age group 25-28. 16% fall into age group 29-35.

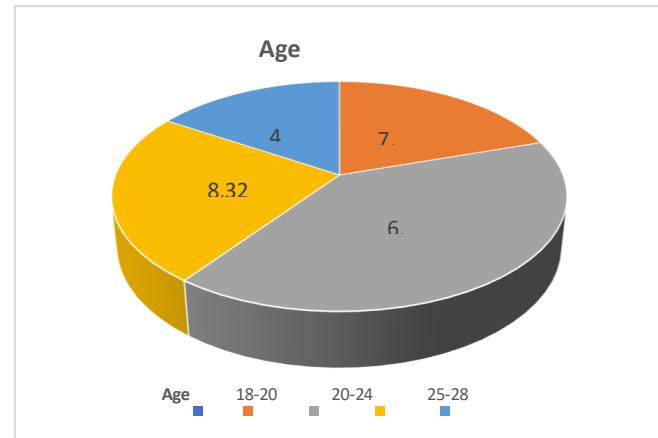


Figure-1: Distribution of age percentage

Literacy rate: Slightly below the national average, there is a disparity in literacy between males and females.

Gender distribution:

The distribution of 25 respondents below according to gender

Gender	Number	Percentage of Respondents

Male	16	64%
Female	9	36%

Table-2: Distribution of respondents by their gender

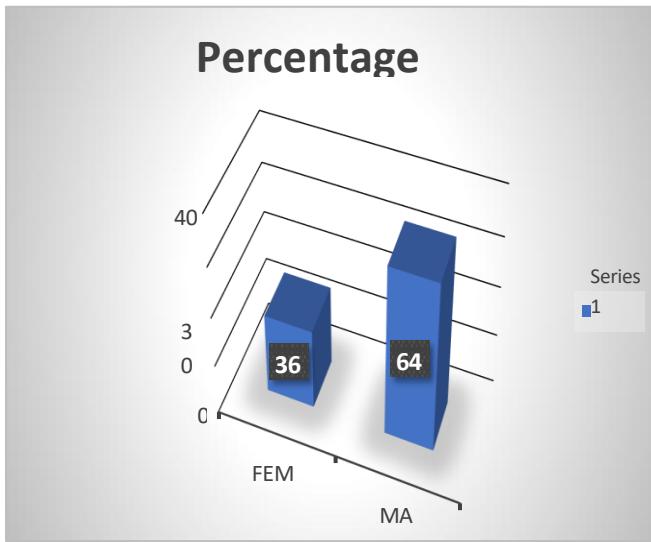


Figure-2: Distribution of respondent's percentage

From the above table, it has been found that among 25 respondents, 64% are male (16), 36% are female (9).

Distribution of respondents by different categories

The category distribution of the 25 respondents is as follows. Table -1 Distribution of Respondents.

Findings: Describe the study respondents by different categories.

Categories	Frequency	Percentage
Teacher	3	12%
Engineer	4	16%
Doctor	3	12%
Students	13	52%
Different private job holder	2	8%
Total	25	100%

Table-3: Distribution of respondents by their profession

From above the table, it has been found that among, 25 respondents, 12% are teachers (3), 16% are engineers (4), 12% are doctors (3), 52% are students (13) and 8% are different job holders (2). These are the presented through the following figure:

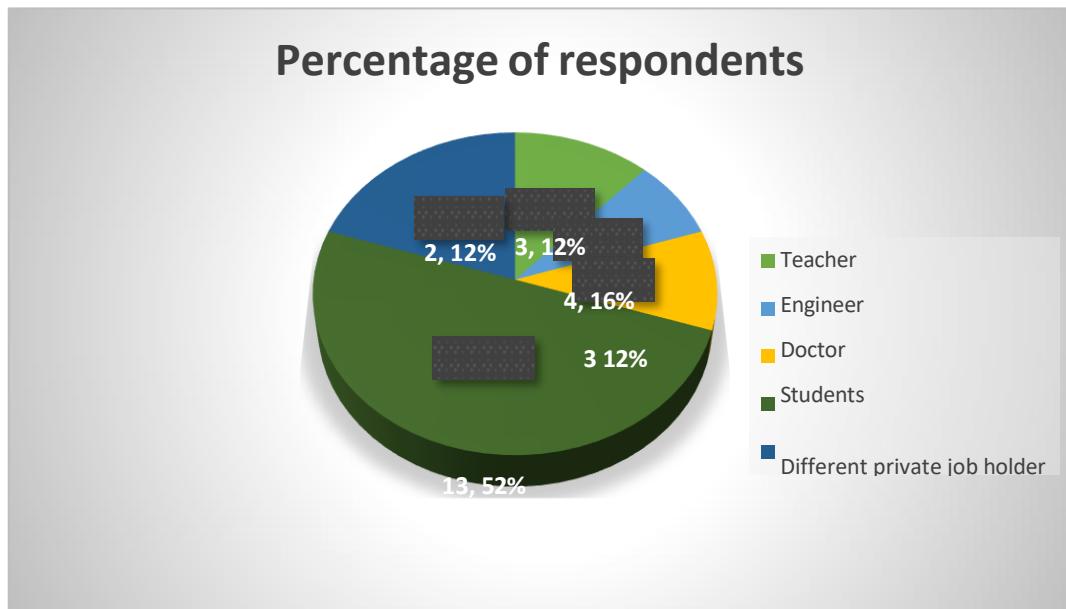


Figure: 3 Distribution of respondents by their profession

Distribution of Respondents by Educational Level of the respondents were as follow as

Level	Frequency	Percentage
Honor's program	6	24%
Master's program	8	32%
PhD program	5	20%
others	6	24%
Total	25	100%

Table -4: Distribution of respondents by the educational level.

Almost fifty respondents fall into the above given educational level. From the above table, I have found that most 24% fall in the honor's program. And then 32% fall in the master's program, 20% fall in PhD program. The left of the respondents fall into others (24%).

The above collected data is shown in the figure below:

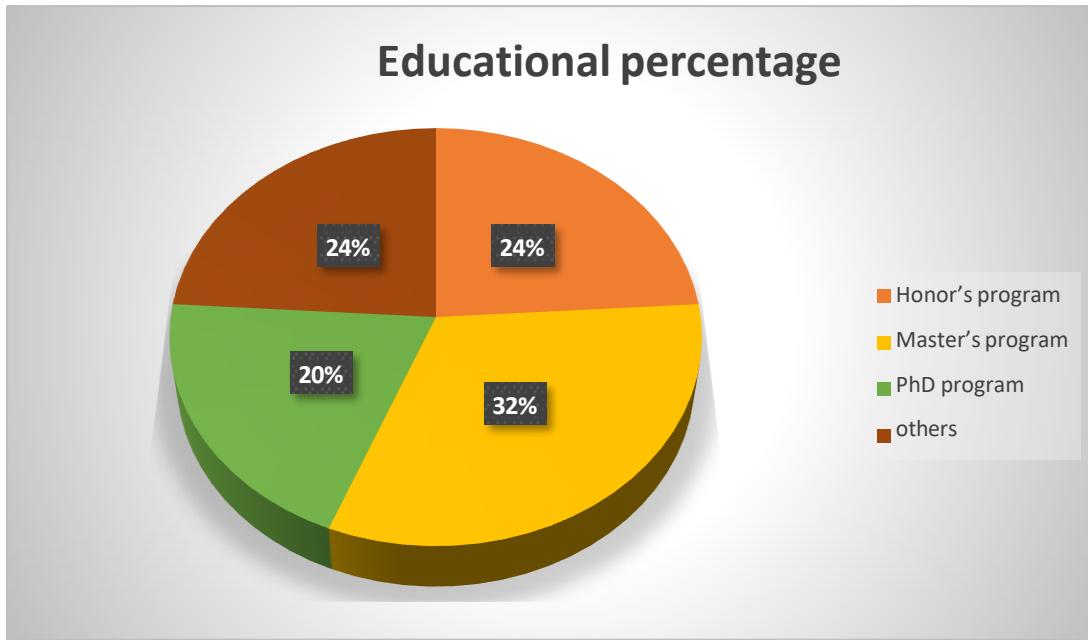


Figure-4: Distribution of respondents by educational level percentage

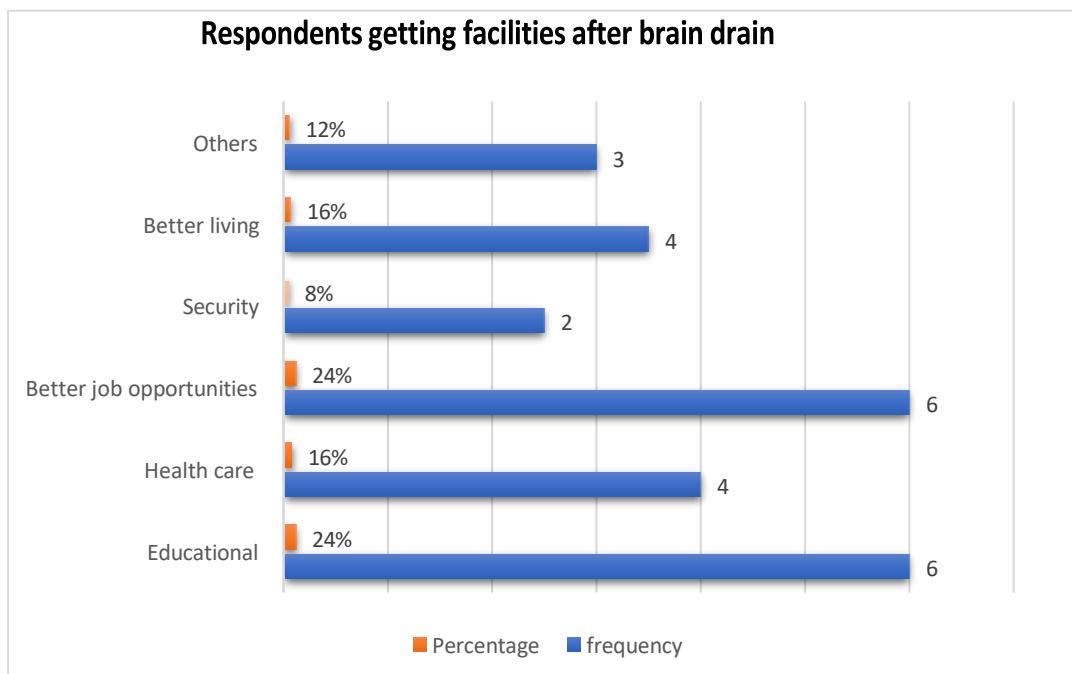
Brain drain driver: Talented people often move to urban areas or abroad for better educational opportunities and careers.

Healthcare Facilities: Primary health care services with some community clinics and some private providers

Challenge: Limited access to advanced medical care pushes people to urban centers for treatment.

Impact on Migration: Poor health care is a contributing factor to migration among skilled workers.

Distribution of respondents getting facilities after brain drain



Graph: distribution of respondents getting facilities after brain drain

In this graph, we can see the getting facilities of brain drain after their migration most of the respondents respond to the research

question they find educational, health care, security, better job opportunities, better living and other facilities.

Social Factors

Community Dynamics: Predominantly rural, with close-knit communities.

Cultural Aspirations: High value placed on education and professional success, leading many to seek better opportunities outside the region.

Gender Dynamics: Women face more significant barriers in accessing education and employment.

Brain Drain Dynamics

Push Factors

Limited job opportunities in skilled sectors. Poor access to quality education and healthcare. Inconsistent infrastructure development.

Pull Factors

Urban and overseas opportunities with better pay and living standards. Availability of scholarships and international education programs.

Name: Nafiu Nisa Tiba Age: 20

Occupation: Student

Tiba's hometown is in Kendua Upazila municipality of Netrakona district. He is a student of HSC 22 batch. Currently studying in a university in Australia. Talked to him and found out that he passed the HSC exam with a GPA of 5. When he was asked why he went to study in a foreign country despite having such good results, he replied that his elder sister was studying in Australia, so he did not want to study in any university in the country. The special reason behind him is that he is attracted by the country's education system, environment and other facilities. So he did not try anywhere else to get admitted. Talking to him, I understood that no push factor forced behind him to study abroad. Rather, the pull factor forced.

Trends

Migration is often directed towards Dhaka and Sylhet domestically and abroad to countries like Malaysia, Saudi Arabia, and the UK.

This socio-economic overview highlights the systemic challenges that lead to brain drain from Kendua Upazila. Addressing these

issues would require strategic investments in education, healthcare, and infrastructure, along with policies to retain talent.

Factors Contributing To Brain Drain in Kendua Upazila

Introduction

In my research I felt it necessary to have a clear understanding of the causes of brain drain in the world as a whole and in Bangladesh in order to fully analyze the state of brain drain in Kendua Upazila. That's why I tried to get ideas from various research papers, journals, articles and newspapers on the subject. I have summarized some of the ideas I received below.

Brain drain means to the process of moving the talented, skilled and educated people of a country or region to a developed country. This is usually for their higher standard of living opportunities, better employment, better educational opportunities or better services. When talented people leave a country to abroad, there is a shortage of talent, skills, and expertise in that country, which can lead to economic and social losses. The brain drain can lead to advancements in advanced technology, research, health care, education and other sectors in those countries, but it is mainly a challenge for developing countries, as they lose their talented workers. There are different kinds of brain drain. Among them three notables are:

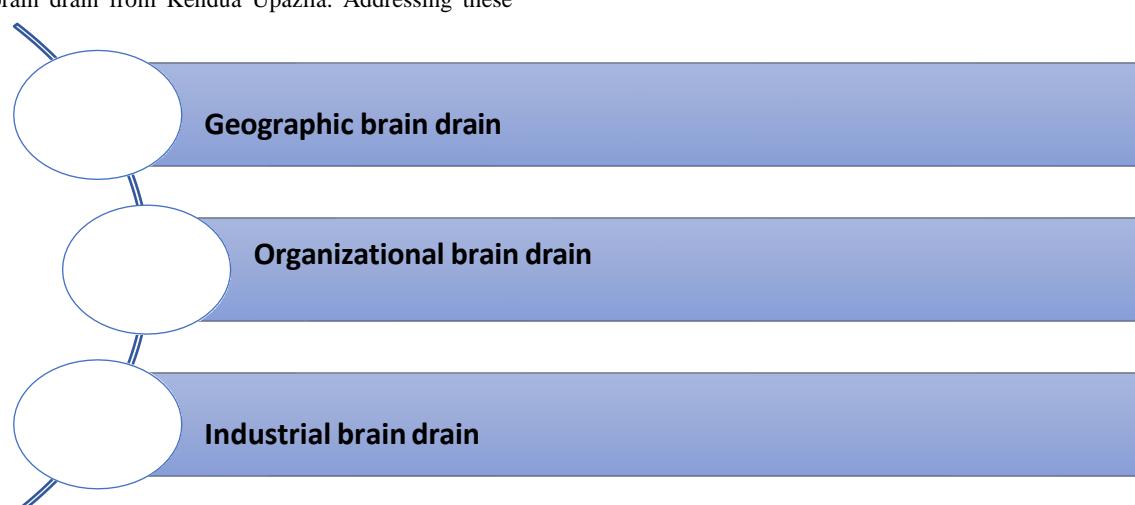
Kinds of brain drain

By talking to the respondents I was able to identify three kinds of brain drain. These are:

Geographic brain drain: It means to the emigration of highly-educated skilled occupational from their own countries in search of well-paid jobs in other developing countries. It has a negative impact on the economic development of the country.

Organizational brain drain: It means to the departure of experienced and skilled people from one organization to another. This exodus can be very harmful for companies.

Industrial brain drain: It refers to the movement of skilled and trained workers from one industry to another for better wages. This leads to a shortage of experienced workers in industries from which they leave.



Overall, brain drain is a widespread phenomenon these days. Many developing and underdeveloped countries like India, Africa and Arab countries are losing talent and skilled professionals. Government and private organizations should take some strict measures to control it aiming at a better and friendlier environment. They should develop working environment, develop infrastructure in educational institutions, create more employment opportunities, enhance wages and develop rural areas. Discrimination and bias in the workplace should be prevented through legislation and strict enforcement. Youth should be encouraged to go abroad in search of work. These action plans can solve the problem of brain drain.

Most of the respondents agreed that talented individuals migrate from their motherland to other countries in search of a better life and jobs. It happens when people go abroad to pursue their job or career and settle. People often go abroad for their higher education and after completing their studies they settle there and do not return to their native land which also results in brain drain. This is a major concern especially for developing countries like India, where it can have a negative impact. However, the brain drain is a call for hope for countries where people immigrate for their jobs or studies benefit more than countries that receive immigrants from other countries. The problem of brain drain can be easily solved by providing good working environment, good salary and other facilities in the home country. Political instability is one of the reasons for brain drain. Bad living conditions for people also lead to brain drain in some countries which pushes them to migrate to others countries.

Factors of brain drain in kendua upazila

Analyzing the root cause of brain drain in Kendua Upazila shows that it is a multifaceted problem. Brain drain generally refers to highly educated or skilled manpower leaving the country or going abroad for work, which hinders the country's development and human resource development. Analyzing the information of the respondents, it can be seen that there are several reasons for this problem in Kendua Upazila. These are:

Economic instability

Like many regions of Bangladesh, most people in Kendua Upazila depend on agriculture and primary industries for their livelihood. But in these cases the profit is less and the income is not stable. Many young people are forced to leave the country for better employment even after higher education. Several factors related to economic instability contribute to brain drain.

Lack of Job Opportunities: In unstable economies, there are often fewer career expectation for highly skilled workers. Without penetration to well-paying, fulfilling jobs, individuals may look to other countries with more robust labor markets.

Few Wages and Poor Working Conditions: Economic instability can lead to fixed wages or inadequate working conditions in certain sectors. Professionals may migrate to countries where their skills are better repaid or where the work environment is more supportive.

Political Instability: Economic instability often comes hand-in-hand with political crisis. If there is corruption, mismanagement, or the erosion of democratic processes, many talented individuals

may leave to avoid potential breakdown to their personal and professional lives.

Limited Research and Development Opportunities: In these times economic instability, government funding for research, development, and innovation tends to reducing. This may push academics, scientists, doctors and researchers to migrate to countries with better support for cutting-edge work.

Currency Depreciation and Inflation: Economic instability often leads to local currency depreciation and high inflation. As salaries lose their value, professionals may look to countries with stronger economies to defend their financial future.

Educational Disruption: Economic instability can also affect the education sector, resulting in fewer opportunities for training and professional growth. Skilled persons may move abroad to search better educational facilities and career development opportunities.

Countries encountering a brain drain can suffer long-term outcome, including loss of human capital, decrease innovation, and stagnant economic growth. Addressing the root factors of economic uncertainty, improving governance and creating better professional and economic opportunities can support reverse this trend?

Rakibul who is 25 years old. He decided to move out after completing his graduation from a reputed BRAC University in the country. When asked about his reasons for leaving, he replied that the country's political instability, self-employment wages accelerated his decision to leave. As a result, the country's economy is becoming unstable.

Lack of educational and research opportunities

Higher education opportunities are limited in Kendua upazila and many students face problems in employment even after obtaining higher education. As there is not enough employment in the country, they want to go abroad for jobs or higher education. Moreover lack of research opportunities, modern facilities and training in universities is another major reason for brain drain. In countries where higher education and research are not developed, talented students go abroad for study or research. As a result, our country is losing a large number of highly skilled people.

Nazmul chowdhury, 30 years old, a University teacher is now living Canada for completing his PHD degree. He said to me that the opportunity for higher education is very low in our country and here have no opportunity for broad research. He also said that if he get high salaried job opportunity, he won't come back.

Lack of local employment

Lack of local employment is a major cause of brain drain, where skilled professionals and educated people leave their country or region in search of better opportunities abroad. Absence of proper employment in technology, advanced service sector or manufacturing sector, migration abroad becomes the only way for many young people to contribute to the progress of the country. The effects are notable:

Economic impact: Skilled workers, such as scientists, engineers, and doctors, leave, reducing the talent pool needed for economic development, especially in specialized industries.

Innovation and Development: A scarcity of professionals can slow down technological development, research and other

progressive initiatives critical to the modernization and diversification of the economy.

Phase of underdevelopment: As more skilled manpower leave, the local workforce cut downs, making it harder to attract new business or investment, which further limits job opportunities and eternize the cycle of underdevelopment.

To combat brain drain, local governments and institutions often try to create policies that stimulate job growth, improve working conditions, and provide stimulus to retain or bring back skilled workers. These may include developing industries with high growth potential, encouraging entrepreneurship, and investing in education and infrastructure that may help create high-skilled jobs.

Mahmud Hasan, a talented IT expert from the upazila, who graduated from a local educational institution, later took a job in a multinational company in Germany. He has earned a huge amount of foreign exchange through his skills but his role in employment or technology development at the local level is absent.

Lack of government support

As much government assistance or facilities as there might be for young people to survive in the country, it is in many cases less. Lack of investment in advanced technology and research hinders skill development of the youth.

Family pressure and social attitudes

Many families encourage children to send their children abroad for higher education. A socially respectable image of going to work abroad has been created, which encourages the tendency to send talented young people abroad.

Deshari jahan, 20 years old a graduate student in Malaysia. She said that, she had no interest for studying abroad. But for her family pressure and her father's wish, now she studying abroad. Because her other cousin also studying abroad.

Political and Social Instability

Political instability, corruption, and lack of government ethics are also important factors in brain drain. When people lose faith and feel insecure, they decide to go abroad. In countries where the political environment is unstable, especially high-end professionals move abroad to secure their future. That is, when the country's political situation is unstable or there is a shortage of work, talented people decide to go abroad. If local development activities are limited in Kendua too, the effect may be to increase the desire among young people to go abroad.

Desire for a better life

Desire for a better standard of living is another major cause of labor trafficking. Developed countries have higher quality healthcare, education, security, and better livelihood opportunities. Many professionals, especially doctors, engineers, researchers, educators, and technicians, want to move to developed countries to get new opportunities in their careers.

Name: Zubayer Ahamed Jishan Age: 18

Occupation: student

Jisan is currently staying in the country. But he wants to study abroad. During the interview he says that I have passed the Hsc exam this year with golden 5. But I have no desire to study in any

university in my country. So I did not take admission in any admission coaching but took admission in a coaching in Dhaka for ILTS. When I ask him the question like others, why he plans to study abroad? In reply, he says, in our country, the work of skilled and talented people is not properly evaluated. Whereas in other countries the value of merit is much higher. So I took this decision after thinking about the future.

Skill development opportunities

In many countries, opportunities for higher skill acquisition and specialized training are abundant. As a result, people move abroad to upskill and improve their professional standing, where their skills are more valued.

Good living for family members

Many times, the decision to go abroad is also taken in search of better opportunities for family or children. Professionals migrate abroad hoping for a safer, better and higher standard of living for their families.

Habibur Rahman, who is 32 years old, an engineer is now living Italy with his wife. He said that, the salary and honor for engineering profession is not sufficient in Bangladesh. For that he makes plan to settle abroad forever for their future and also their children's future.

International communication and experience

In the age of globalization there are increasing opportunities to gain international experience and get used to the culture, language, and work environment of other countries. This motivates many professionals to move abroad.

Domestic policy limitations

Sometimes the country's government policies such as lack of job creation, excessive tax increases, or no incentives for professional development lead to brain drain. Skilled people move abroad in search of new opportunities.

Transition to knowledge-based society

Today, most developed countries are moving towards a knowledge-based economy, where highly educated and skilled people play a major role in their careers. In such a society, those who want to work for the development or growth of the country, go abroad to create their professional opportunities.

Name: Rudra Bishaw Age: 25

Occupation: Student

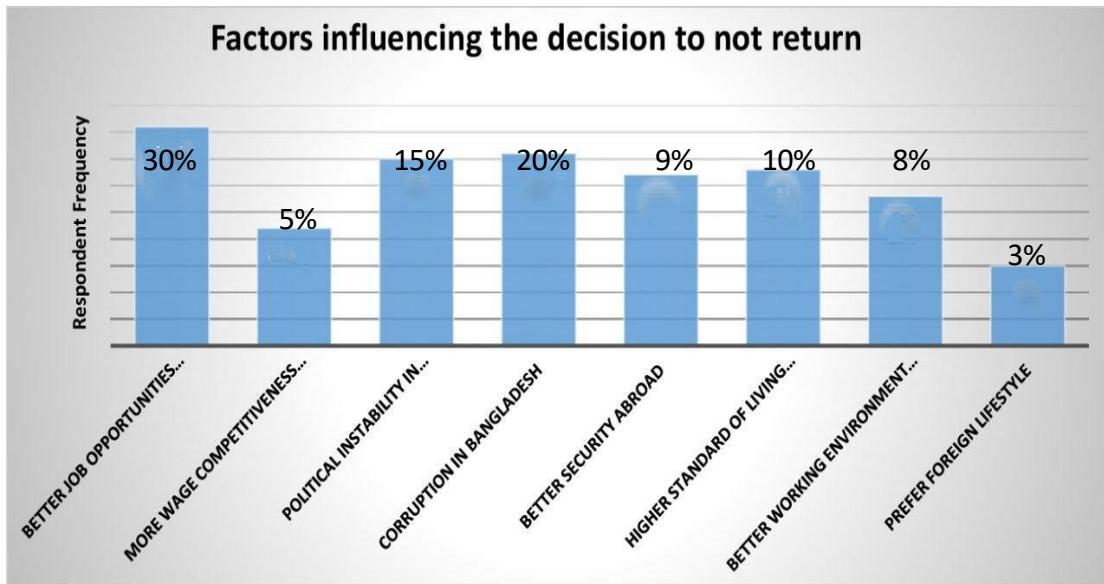
Rudra is currently studying Masters in Varsity at UNN University in Russia. Talking to him, I got to know that despite being a homesick person, there are reasons behind the country's political instability, job market crisis, etc. to study abroad. He said that I initially wanted to do something in the country, but when I came to the fourth year of honors, I went into a bit of depression that I could do something in the country in addition to doing Masters! Or go abroad to do masters. So I talk to some seniors. Who are studying in foreign universities. They give me ideas about universities abroad. Then I decided that I would go out and do a part-time job along with my studies So as soon as I finished my honors, I applied for scholarships to various universities abroad and luckily got a fully funded scholarship to a university in Russia.

Now I am able to pay for my studies by doing a part time job along with my studies and also help my family a bit. Which was not possible so quickly in the country?

Conclusion

I spoke to a few Respondents and realized that most of them have no plans to return home. When asked for the reason, most of the

informants were of the opinion that many of the informants will not return to the country due to various reasons such as job benefits in foreign countries, better security system than the home country, political instability in own country, etc. The following graph illustrates the point more clearly.



Impact of Brain Drain

Introduction

Brain drain is a process whereby skilled, educated people of the country migrate to other countries for better living, higher education, better job, better life for the future generation etc. It has now become a global problem that is of great concern to developing countries. Its impact is more profound in rural areas like Kendua Upazila, as it can cause serious damage to local development, economy and overall development of society.

Impact of brain drain

Analyzing the data of most of the respondents, we find that economic, educational, social, political etc. factors have a huge impact on the brain drain. It is highlighted below:

Economic impact

The biggest impact of money laundering falls on the economic sector:

- Staff shortage: In rural areas like Kendua Upazila, where the number of skilled workers or professionals is already low, the local market becomes scarce as more skilled people move abroad due to brain drain. This increases the cost of labor and hinders businessmen.

From a famous medical center in Kendua Upazila, it is known that from 2018 to 2023, about 10 doctors have accepted jobs in hospitals in developed countries. One of them, Dr. Rahim, who was skilled in complex operations at the local level, settled in Canada. In order to meet the shortage, the local hospital has disrupted the provision of services as per the demand.

- Increase in income: Those who go abroad certainly send remittances, but it goes directly into the economy of the other country instead of local economic development. As a result, while the picture of economic flows in regions like Kendua improves, it does not contribute in the long run.

Mahmud Hasan, who is 28 years old, a talented IT expert from the upazila, who graduated from a local educational institution, later took a job in a multinational company in Germany. He has earned a huge amount of foreign exchange through his skills but his role in employment or technology development at the local level is absent.

Impact on education and human resources

Brain drain also has a negative impact on the education sector:

- Human resource development: After receiving education in rural areas, if the youth migrate abroad for higher education or skills, the quality of local educational institutions also tends to decline. Lack of teachers and professionals weakens the education system.
- Lack of Skill Training: Training, courses or skill development activities required to produce skilled workers also stagnate. Outmigration reduces the demand for these trainings and money allocated for training goes abroad.

Social influence

The social impact of piracy is also extensive:

- Family instability: Families who move abroad are sometimes under social and emotional stress. Long-term

isolation, living abroad leads to a lack of social relationships and empathy.

- Community instability: When members of families in rural areas move abroad one by one, a vacuum is created in the local community. A sense of despair and loss grows among the youth.

Political influence

Brain drain can also affect the country's politics:

- Divided societies: Many of those who migrate abroad may return home and become involved in political or social issues, which may lead to conflict with the local government.
- Lack of leadership in various sectors: If talented people, who could lead in politics, education or social service, move abroad, there may be a lack of leadership in the society, which weakens the local administration.

Rafiqul Islam, 35 years old, is a class teacher in a local high school, mentioned that several of his talented students went abroad for higher education and never came back. He said, "If we could provide them with opportunities for research and education locally, the quality of our school would increase.

Psychological and cultural influences

- Changes in cultural values: People who go abroad often develop an interest in Western or foreign cultures. It can lead to disdain for local traditions and cultural values.
- Lack of new experiences and information: Those who remain in the local community are largely isolated from the global perspective, which limits development.

Impact on universities and research

- Loss of research and innovation: When talented students and researchers move abroad, the research projects and innovation activities of the universities suffer a lot. Lack of talented people in the field of research hinders the progress of the country.

Steps to prevent brain drain

- Social Security: If more effective systems can be developed in rural areas for job opportunities and better living conditions, then it is possible to obstacle the brain drain to some range.
- Government policies: If the government creates job opportunities for educated and skilled people, such as job in specialized industries, agricultural technology, or health sector, it can be helpful in defensing brain drain.

Some of the impacts of brain drain have been learned from the above discussion. Analyzing this discussion, it can be seen that there are some positive and negative impacts of brain drain. Which are highlighted separately below:

Positive impacts

Some of the informants mentioned some positive reasons despite being brainwashed. For example:

1. Increase in remittances: Some of the respondents said that when talented and skilled people work abroad and

send remittances to the country, it plays a very important role in the country's economy. Remittances increase the money flow of the country and increase the national income.

2. Foreign Experience and Knowledge: A person living abroad gets access to modern technology and advanced education. Later, if they return to the country, they bring with them the knowledge and skills that can contribute to the development of the country.
3. Personal development and improvement in quality of life: brain drain has led to improved employment and income opportunities for many individuals. As a result, their quality of life improves, which also affects their families and society.
4. Increasing international connectivity: Talents moving abroad create home-abroad connectivity, which can facilitate investment, trade and cultural exchange.

Negative impacts

There are represent the negative impact of brain drain on the economy. Brain drain is the migration of skilled manpower to other countries. Although brain drain may bring some economic and social benefits but it mostly leads to many negative impact on the economy. Let's describe each negative impact.

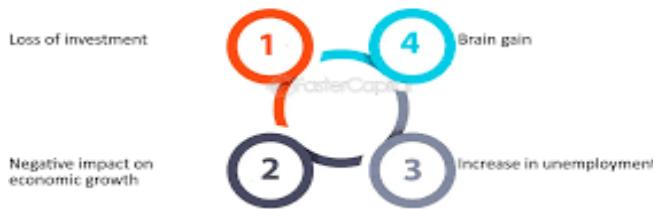
1. Shortage of Skilled Manpower: A skilled manpower shortage occurs when a country does not have enough trained, experienced or skilled people. This deficit can be exacerbated by brain drain, and thereby disrupt economic activity and development. The situation that arises as a result of the exodus of skilled manpower through brain drain. Brain drain is a process whereby highly educated, trained or skilled workers migrate to developed countries, where their wages and job opportunities are higher. Due to this, the number of these people in the country decreases, and their lack of skills create a shortage of skilled manpower in the country. A shortage of skilled manpower can particularly affect the technology, healthcare, engineering, research and education sectors. Lack of skilled manpower in these sectors hinders the provision of quality services, innovation of new technologies or development of necessary infrastructure. As a result, the economic growth and development of the country lags behind.

Mahmud Hasan, who is 28 years old, a talented IT expert from the upazila, who graduated from a local educational institution, later took a job in a multinational company in Germany. He has earned a huge amount of foreign exchange through his skills but his role in employment or technology development at the local level is absent.

2. Economic loss: When a country invests huge amounts of money and time in creating educated and skilled workers, but those workers go abroad, the benefits of that investment do not flow to the country's economy. The economic benefits of investment by the country's government and households are transferred to other countries. Besides. Talented people can work in local industry, business and research if they stay inside the country. But they cannot participate in the economic

development of the country and the introduction of novel technologies or new ideas due to their migration abroad, thereby hindering the overall development of the country. Thus, brain drain can be detrimental to a country's economy, as it can lead to waste of human resources, labor market crises, and block long-term development. The country's economic growth slows down as highly skilled and trained people leaves their country. The money earned by them is invested abroad instead of returning to the country's economy. There are many reasons for economic loss. Here are four important points:

Economic Impact of Brain Drain



3. Waste of Investment: The investment made by the government in education does not benefit the country due to brain drain. Rather, the person contributes to the economy of the foreign country, so this investment does not reap the benefits of the country. The reasons for the waste of investment in brain drain can be explained in many ways. Brain drain means to the process, where skilled and experienced people or professionals move from home country to another country, where their skills and experience can be fully utilized. As a result, there is a kind of loss in the development and economic growth of the host country. Disinvestment occurs when funds that one country invests in the education, training or skills of its people are diverted to another country and that country receives the benefits of this investment. A survey found that the government spends Rs 15 lakh on a medical student, Rs 10 lakhs on a BUET student and Rs 5 lakh on a university student. Where a country spends such money on the education and training of its people, but when they go abroad, the full benefit of that investment does not flow within the country. Thus the country loses its human resources and skills.

Therefore, brain drain is not only limited to the personal interest of an employee or professional, but can also cause damage to the overall economic and social development of the country.

4. Barriers to research and innovation: The migration of talented people abroad slows down research and innovation in the country, resulting in lack of technological development and the country lags behind in international competition.
5. Increasing Social and Regional Inequalities: Lack of talented and highly skilled people in the country has complicated various job sectors. As a result, increasing regional inequality.
6. Increase in unemployment: Unemployment can increase due to brain drain. When skilled and trained people leave

a country, the number of skilled people in that country's labor market decreases. This, in turn, makes it difficult for them to fill vacancies, and thereby limits opportunities for new hires. As the shortage of skilled workers increases within the country, the country faces more unemployment in the workforce. Thus, brain drain can have a negative impact not only on the domestic economy, but also on the country's labor market and unemployment situation.

Name: Naimul Haque Age: 28

Occupation: Job Holder

When I interviewed him, he said that it was my childhood dream to go to Canada. From there, he originally wanted to study abroad. He completed his Honors from Daffodil, a well-known institution in the country, completed Masters, PhD degrees from a Canadian university and is currently working in a research institute. When I asked him whether he has a plan to return to the country. He replied that currently I am living in Canada with my family so for now I have no plans to return home.

Government needs special attention to eliminate these negative effects. Opportunities should be increased especially in the field of employment and research so that skilled manpower can contribute to the development of the country.

Recommendation

In the research I tried to find out how the potential of a nation is being lost due to brain drain. Also, I tried to find out the effect of brain drain on the country.

In the first chapter I discuss the research problem, background of the research, theoretical framework, importance of the research, ethics of the research and limitations of the research. In the second chapter I present some literature review. In the third chapter I have used different types of research methods and research techniques in data collection keeping in view the research objectives. The research methods and techniques used include sampling, interviewing, key informant interviews, observation, questionnaires, group discussion methods, recorder notebooks and diaries, case studies and research work experience. In the fourth chapter I present the demographic profile of the study area. In the fifth chapter, I have described in detail the reasons for brain drain in Kendua upazila. In the sixth chapter I have discussed the impact of brain drain in the context of Bangladesh. Then I discussed the results of the research. Besides, I have shown the obstacles that work in the case of brain drain.

In conclusion, the following steps can be taken to prevent brain drain in Kendua Upazila:

Upgrading of education: Ensuring modern quality education system in local educational institutions.

Employment Opportunities: To provide training for small- and small-scale entrepreneurship to increase employment opportunities.

Incentives and Scholarships: Providing financial assistance and scholarships at the local level to retain talent.

Social Awareness: Making people aware of the negative effects of brain drain.

Modernize Facilities: Improve local infrastructure like transportation, healthcare, internet connectivity, and recreational facilities to make the area more livable and attractive.

Promote Urbanization: Develop Kendua as a hub with amenities to rival urban centers.

If talented people are retained in the upazila, the overall development of Kendua will be accelerated and it will become a self-reliant and progressive region in the future.

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