BRAIN DRAIN AND ITS IMPACT ON NEPALESE STUDENTS

A Dissertation submitted to the Office the Dean, Faculty of Management in partial fulfilment of the requirements for the Master of Business Studies

By

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CERTIFICATE OF AUTHORSHIP

I hereby corroborate that I have researched and submitted the final draft of dissertation entitled **"Brain Drain and its Impact on Nepalese Students"** The work of this dissertation has not been submitted previously for the purpose of conferral of any degrees nor it has been proposed and presented as part of requirements for any other academic purposes. The assistance and cooperation that I have received during this research work has been acknowledged. In addition, I declare that all information sources and literature used are cited in the reference section of the dissertation.

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Anita Shrestha

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REPORT OF RESEARCH COMMITTEE

Anita Shrestha has defended research proposal entitled **"Brain Drain and its Impact on Nepalese Students"** successfully. The research committee has registered the dissertation for further progress. It is recommended to carry out the work as per suggestions and guidance of supervisor Dr Dhan Raj Chailse and submit the thesis for evaluation and viva voce examination.

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APPROVAL - SHEET

We, the undersigned have examined the thesis entitled **"Brain Drain and its Impact on Nepalese Students"** presented by Anita Shrestha, a candidate for the degree of Master of Business Studies (MBS Semester) and conducted the viva voce examination of the candidate. We hereby certify that the thesis acceptable for the award of degree.

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Anita Shrestha

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ABBREVIATIONS

AGM: Annual General Meeting

AM: Arithmetic mean

BAFIA: Bank and Financial Institution Act

BD: Brain Drain

BFIs: Banks and Financial Institutions

CV: Coefficient of Variation

Edu: Education

EP: Employment Prospects

EU: Economic Uplifts

FY: Fiscal Year

JCR: Journal Citation Report

MP: Migration Policies

PA: Personal Ambition

SD: Standard Deviation

ABSTRACT

This study is examined brain drain and its impact on Nepalese Students. The main objectives of this study are to assess the current status of brain drain on its impact on Nepalese students, to examine the negative outcomes of the migration of skilled professional causing brain drain on Nepalese students and to analyze the positive outcomes of skilled migration leading to brain drain on Nepalese students. Employment Prospectus (EP), Economics Uplifts (EU), Education, Personal Ambition (PA) and Migration Policies (MP) are the independent variables and Brain Drain (BD) is the dependent variable in this study. Descriptive statistics, correlation and multiple regression analysis are taken to present data. The major finding of this study were the correlation matrix highlights several strong and significant relationships among the variables. Brain Drain (BD) shows the strongest correlations with Employment Prospectus (EP) and Economic Uplift (EU), indicating that diversification is closely tied to these factors. Education (Edu) also plays a significant role in relation to diversification, economic performance, and environmental uncertainty. Personal Ambition (PA) and Migration Policies (MP), while showing significant correlations with the other variables, generally have weaker relationships. These findings suggest that brain drain, employment prospects, and educational attainment are key factors interconnected with economic uplifts and personal ambition, ultimately impacting migration policies. Comparatively, EP and EU are the most significant predictors of Brain Drain, with high t-values and significance levels of .000. Their positive coefficients and high standardized coefficients indicate that better employment prospects and economic conditions strongly drive Brain Drain. PA also has a significant positive effect, though its impact is smaller. In contrast, Edu and MP do not significantly predict Brain Drain, as indicated by their higher p-values and low standardized coefficients. Personal Ambition also plays a role, though to a lesser extent. Education and Migration Policies, on the other hand, do not have a significant impact on Brain Drain. These findings provide valuable insights into the factors that drive Brain Drain and suggest that enhancing employment opportunities and economic conditions are crucial in addressing this issue

Keywords: *Brain Drain, Employment Prospectus, Education, Personal Ambition, Economic Uplifts and Migration Policies.*

CHAPTER - I

INTRODUCTION

1.1 Background of the Study

Brain drains, the migration of educated and skilled individuals from developing to developed countries, is a significant challenge for Nepal. Nepal's youthful and educated population have been drawn to other countries in search of better possibilities due to the country's rich cultural legacy and lack of economic prospects. The desire for better employment prospects, higher-quality education, and more hospitable economic environments in the US, Australia, Canada, and other European countries are the main causes of this emigration. Nepal's political unrest, economic underdevelopment, and poor infrastructure all contribute to this issue by impeding the country's residents' opportunities for both personal and professional advancement.

The impact of brain drain on Nepal is profound and multifaceted.. Economically speaking, the country loses a great deal of human capital a resource essential to the growth of the nation when competent individuals leave. There is a lack of skilled experts in key sectors including healthcare and education, which lowers the quality of services offered. Socially, brain drain causes rifts in families and communities since immigrants frequently leave behind dependents, which creates psychological and interpersonal difficulties. A cultural shift is also brought about by the educated youth's constant departure, leading the remaining population to believe that emigration is the best route to prosperity. A comprehensive strategy is needed to address brain drain, one that involves strengthening the educational system, creating incentives for people to remain in Nepal, and promoting sustainable national growth.

The process of globalization of markets and production has helped firms and people to be increasingly international (Paul & Benito, 2018; Paul & Snchez-Marcillo, 2019). Because of the profound social and economic effects of skilled migration, scholars and politicians have continued to be interested in this topic. The United Nations estimates that 3.25 percent of individuals live outside of their country of birth worldwide; employment is a major factor in this (UN, 2016); by 2020, this percentage is expected to rise to 3.6 percent (IOM, IOM). According to Petersen and Puliga (2017), human capital and knowledge workers are recognised as the foundation of learning organisations and knowledge-based economies.

The number of highly qualified professionals leaving developing nations has grown over time (Czaika and De Haas, 2014). Migration causes developing nations to lose a significant amount of highly trained human capital to outside markets (Artuç et al., 2015).

A United Nations (UN) assessment on international migration states that a sizable share of migrant populations roughly 244 million, or 58% of the total live in industrialized countries (UN, 2016); by 2020, that number is expected to rise to nearly 281 million (IOM, IOM). With 46.1 million, 11.1 million, and 11.0 million migrants, respectively, the US, Germany, and Russia are the top three destination nations. Sixty-one percent of foreign migrants are from developing nations, including Russia, Mexico, and India, which is the largest source country (World Bank, Migrations and Development report, 2016). There is a severe lack of qualified experts throughout the world. Because of this, skilled workers migrate from developing to developed nations, originating in source countries (United Nations, 2010).

During the 1960s and 1970s, brain drain was a contentious topic. Macroeconomic, microeconomic, and other migration theories have all been used to explain migration. But more investigation into the theories and literature shows that migration's causes and effects have evolved over time (Tung, 2008). This systematic literature study was carried out since there hasn't been a current comprehensive evaluation in this field. We clarify skilled migration nuances, which is much needed. Additionally, there is a dearth of comprehensive frameworks that identify and explain each of these elements. Migration theories and prior studies have consistently linked economic considerations to international migration. It would be beneficial to specifically take qualified professionals like scientists, doctors, and engineers into account when analysing cross-border migration. Researchers are also interested in comprehending cross-border migration via the prism of behaviour theories. As a result, we use Herzberg's (1968) and Maslow's (1948) theories as the foundation for our explanation of how human needs influence migration decisions and facilitate skilled migration.

Previous research has focused on developed countries that try to attract skilled professionals from developing countries to meet their human resource needs, while developing countries focus on halting the exodus. But attitudes towards skilled migration have changed recently (Tung, 2008). When a national-level environment, sufficient regulations, robust property rights, and research infrastructure may all play significant roles in preventing brain drain, it is foolish to rely solely on economic measures (Zweig et al.,

2021). Developing nations like China and India, which at first prioritised halting brain drain, are increasingly focused on brain gain by encouraging migrants to return home. They are now reaping the rewards, including technology transfer, remittances, and network development for information exchange. Similar to this, industrialized nations that supported immigration, like the US (one of the most popular places for emigrants), have imposed tough regulations such limiting H-1B work visas in an effort to reduce the inflow of professionals (Anderson et al. 2022). These shifting dynamics therefore suggest that a more comprehensive and inclusive understanding of cross-border skilled professional mobility and migration is necessary, especially with regard to the causes and effects of skilled migration. According to recent research, it's important to reframe the concept in order to distinguish between the severity of issues and the narratives or storylines that are employed to explain them (Hasselbalch, 2019). Notably, no particular review on skilled migration has been carried out recently.

The study on brain drain among Nepalese students underscores the significant impact of economic incentives and favorable migration policies in driving emigration. Perceived economic benefits, higher education quality abroad, and supportive migration policies are the primary factors influencing students' decisions to leave Nepal. This exodus results in a substantial loss of human capital, adversely affecting the country's economic development and exacerbating shortages in key sectors like healthcare and education. Additionally, the social fabric of Nepal is strained as families and communities are fragmented by the emigration of young, educated individuals.

Addressing brain drain effectively requires a multifaceted approach. Policymakers must focus on improving domestic economic conditions, creating better job opportunities, and enhancing the quality of education to make staying in Nepal more attractive. Additionally, developing policies that encourage students to return after completing their studies abroad could help mitigate the adverse effects of brain drain. By understanding and addressing these critical factors, Nepal can work towards retaining its talent and fostering sustainable national development.

1.2 Problem Statement

Brain drains, the phenomenon where skilled and educated individuals migrate from their home country to more developed nations, is a significant issue for Nepal. This brain drain has significant effects on the socioeconomic environment of the nation, particularly for Nepalese students. The desire for greater education, better employment prospects, and superior living conditions overseas are the main causes of brain drain. Due to these circumstances, Nepal, a country already facing developmental obstacles, is in danger of losing its human capital, which is essential to its advancement. One worrisome trend in Nepal's fast expanding and important service and commercial industry is the exodus of highly qualified personnel to other nations. This is the IT sector. Although the repercussions of the brain outflow of Nepalese labor force have been extensively studied, little is known about the motivations behind the brain drain of IT experts (Shrestha, 2017).

Economically, the brain drains results in a significant loss of skilled labor, which is essential for driving innovation and sustaining growth. Experts like physicians, engineers, and IT specialists are in high demand elsewhere, which causes shortages in these vital fields in Nepal. Due to this scarcity, the nation is forced to rely more heavily on foreign knowledge, which reduces its ability to rely on itself. Since these professionals benefit the economy of their host nations rather than their own, the state, which often bears the financial cost of their education, bears little return on investment.

From a social perspective, brain drain perpetuates a culture of migration among the youth. From a sociological point of view, youth migration is encouraged by brain drain. Due to their perception of Nepal's limited prospects for both professional and personal development, many students wish to emigrate. The success tales of their colleagues who have moved overseas and found better prospects serve to support this goal. The quality of local educational institutions is impacted by the steady exodus of talented individuals, which demoralizes the remaining ones. The education system suffers and students' overall quality of education is impacted when there are less qualified professionals available to teach and mentor. The main causes of the exodus of IT experts from Nepal include the country's lower degree of socioeconomic development, the domination of foreign cultures and educational systems, and the relative higher salaries in foreign currencies (Mainali, 2019).

The impact of brain drain on Nepal's innovation and development is profound. Important people leaving stifles advancement in vital fields including research, technology, and healthcare. For example, Nepal's health system has a persistent shortage of trained physicians and specialists, which makes public health issues worse. In a similar vein, the IT and technology industries, which have enormous potential to completely change Nepal's economy, struggle to grow because of the lack of qualified workers who have emigrated abroad.

At the community level, the effects of brain drain are acutely felt, particularly in rural areas. The lack of educated and competent people in these areas to spearhead local development projects exacerbates regional disparities. Urban areas nevertheless confront difficulties even though they are better positioned to hold onto some skilled workers. As a result, rural areas have slower economic growth, worse educational results, and restricted access to high-quality medical care and cutting-edge technology. Emotional and familial difficulties are psychologically caused by brain drain. Families are frequently split up for protracted periods of time, which can undermine family ties and cause social fragmentation. Emotional burdens such as despair, stress, and loneliness affect migrants as well as their relatives back home. Individuals' mental health is impacted by this separation, and it may have long-term social repercussions.

Addressing brain drain in Nepal requires comprehensive policy interventions. Nevertheless, governance structures frequently find it difficult to put in place sensible talent retention strategies. The creation of an atmosphere that motivates professionals to remain is further complicated by political instability, corruption, and poor infrastructure. Although the economy benefits greatly from remittances from the diaspora, this is not a long-term solution for economic progress and stability.

In conclusion, brain drain is a complex issue with far-reaching impacts on Nepalese students and the broader societal framework. The loss of skilled professionals undermines economic growth, impedes social progress, and stifles innovation. It creates educational disparities, regional inequalities, and emotional strains within families and communities. To mitigate these impacts, Nepal must invest in creating better opportunities locally, improving governance, and fostering an environment that values and utilizes the skills of its educated workforce. Comprehensive efforts are essential to retain talent and ensure sustainable development for Nepal. This research will be of great importance to

policymakers, academics, and industry professionals, as it will provide a clear understanding of the current scenario and the factors that influence IT professional brain drain in Nepal. By addressing this gap in the existing literature, this research will contribute to the development of targeted strategies to mitigate the problem of IT professional brain drain in Nepal. The problems of this study which are given below;

i. What is the current status of brain drain on its impact on Nepalese students?
ii. What are the negative outcomes of the migration of skilled professional causing brain drain on Nepalese students?
iii. What are the positive outcomes of skilled migration of skilled leading to brain drain on Nepalese students?

1.3 Objectives of the Study

The specific objectives of this study is based on above statement of problems and research questions:

i. To assess the current status of brain drain on its impact on Nepalese students.

ii. To examine the negative outcomes of the migration of skilled professional causing brain drain on Nepalese students.

iii. To analyze the positive outcomes of skilled migration leading to brain drain on Nepalese students.

1.4 Hypothesis of the Study

Following are the hypothesis set to test for the study:

H1: There is a significant relationship between employment prospectus and brain drain.

H2: There is a significant relationship between economics uplift and brain drain.

H3: There is a significant relationship between education and brain drain.

H4: There is a significant relationship between personal ambition and brain drain.

H5: There is a significant relationship between migration polices and brain drain.

1.5 Rationale of the Study

The phenomenon of brain drains, characterized by the emigration of educated and skilled individuals to more developed countries, presents a significant challenge for Nepal. It is important to comprehend the purpose of this research as well as how it specifically affects students from Nepal for a number of reasons. First and foremost, Nepal's human capital, which is essential to the country's socioeconomic development, is being diminished by the exodus of highly trained individuals, such as engineers, doctors, and IT specialists. Due to a severe labor shortage, which inhibits innovation, industrial expansion, and economic advancement, Nepal is facing a dearth of trained labor as many experts leave the country in search of better possibilities overseas. Policymakers and stakeholders may adopt focused policies to alleviate the negative effects of brain drain and foster an environment that maintains and fosters local talent by looking into the underlying causes and repercussions of the phenomenon.

The educational sector in Nepal is particularly affected by brain drain. Studying overseas is a popular choice among Nepalese students, who are motivated by their desire for better employment opportunities and higher education. This pattern affects Nepal's educational system's quality in addition to depleting the nation's financial reserves. Relocating top students and professionals causes a brain drain that makes it harder for local colleges and universities to retain talented faculty, mentors, and researchers. As a result, students' education becomes less and less effective, perpetuating a vicious cycle in which students are further encouraged to look for chances elsewhere by their inability to obtain an excellent education. Comprehending this dynamic is crucial for formulating educational policies that improve local institutions' quality and boost their worldwide competitiveness.

Moreover, brain drain has significant social implications that warrant thorough investigation. Family division and the disintegration of social networks are frequent consequences of the relocation of highly qualified people. The migrants and their families may have severe psychological impacts from this separation, such as despair, stress, and feelings of loneliness. It is possible to discover the support networks and treatments required to address these emotional and psychological difficulties by researching the social effects of brain drain on Nepalese students and their families. Furthermore, by looking at the societal elements that lead to brain drain like unstable political systems, inadequate

infrastructure, and few job prospects policymakers can enact changes that foster an atmosphere that is more favorable for both professional and personal development in Nepal.

Economic analysis of brain drain is also critical. The migration of skilled individuals results in the loss of potential economic contributions that these individuals could have made if they had remained in Nepal. This loss is not only in terms of direct contributions to GDP but also in terms of innovation, entrepreneurship, and the creation of new industries. By studying the economic impact of brain drain, researchers can quantify the financial cost to the nation and advocate for policies that incentivize skilled professionals to stay and invest their talents in Nepal. This includes examining the role of remittances, which, while beneficial, are not a sustainable solution for long-term economic development.

Furthermore, investigating brain drain provides insights into global migration patterns and the interconnectedness of economies. Understanding why Nepalese students and professionals choose to migrate helps identify global trends in education and labor markets. This knowledge is crucial for negotiating international agreements and partnerships that benefit both Nepal and the host countries. It also allows for the design of exchange programs and bilateral agreements that facilitate the return of skilled professionals after gaining experience abroad.

In conclusion, the rationale for studying brain drain and its impact on Nepalese students is multi-faceted and deeply interconnected with the country's broader socio-economic development goals. By examining the causes, consequences, and potential solutions to brain drain, this study aims to provide a comprehensive understanding that informs policy decisions, enhances educational quality, supports social cohesion, and fosters economic growth. Addressing brain drain effectively requires a holistic approach that considers the aspirations of Nepalese students, the needs of local industries, and the broader socio-political context in which these dynamics occur. Through this study, we aim to contribute to a body of knowledge that helps Nepal retain its talent and achieve sustainable development.

1.6 Limitation of the Study

The current study is conducted within specific limitations, as all studies do. Brain drains and its impact on Nepalese students served as the basis for this study. The following is a list of some restrictions:

i. There are only two primary factors used as independent variables and one primary factor used as a dependent variable; many other variables, if any, that are relevant to investment decisions are not taken into account.
ii. Only a very small number of samples all from Kathmandu city were collected. As a result, it might not provide exact or comparable results to the research that was conducted, nor might it be pertinent to the issues faced by all investors in Nepal.
iii. Since we were short on time and could not perform a comprehensive analysis, this study might not be as generalizable.
iv. We were unable to conduct research outside of the valley due to a lack of resources. As a result, extrapolating the findings to investors outside of the valley might present challenges.
v. The study only covered the Kathmandu Valley, which may not be a representative sample of Nepal's whole population.
vi. There might be various technique and method to perform the study on the brain drain and its impact on Nepalese students, but the study is focused on limited statistical tools (descriptive statistics, correlation and regression) analysis only.

CHAPTER II

REVIEW OF LITERATURE

2.1 Conceptual Review

The process of globalization of markets and production has helped firms and people to be increasingly international (Paul & Benito, 2018; Paul & Snchez-Marcillo, 2019; Paul & Mas, 2020; Paul & Rosado-Serrano, 2019). Because of the profound social and economic effects of skilled migration, scholars and politicians have continued to be interested in this topic. The United Nations estimates that 3.25 percent of individuals live outside of their country of birth worldwide; employment is a major factor in this (UN, 2016); by 2020, this percentage is expected to rise to 3.6 percent (IOM, IOM). According to Petersen and Puliga (2017), human capital and knowledge workers are recognised as the foundation of learning organisations and knowledge-based economies. The number of highly qualified professionals leaving developing nations has grown over time (Czaika and De Haas, 2014; IOM, IOM). Migration causes developing nations to lose a significant amount of highly trained human capital to outside markets (Artuç et al., 2015).

A United Nations (UN) assessment on international migration states that a sizable share of migrant populations roughly 244 million, or 58% of the total live in industrialized countries (UN, 2016); by 2020, that number is expected to rise to nearly 281 million (IOM, IOM). With 46.1 million, 11.1 million, and 11.0 million migrants, respectively, the US, Germany, and Russia are the top three destination nations. Sixty-one percent of foreign migrants are from developing nations, including Russia, Mexico, and India, which is the largest source country (World Bank, Migrations and Development report, 2016). There is a severe lack of qualified experts throughout the world. Because of this, skilled workers migrate from developing to developed nations, originating in source countries (United Nations, 2010).

During the 1960s and 1970s, brain drain was a contentious topic. Macroeconomic, microeconomic, and other migration theories have all been used to explain migration. But more investigation into the theories and literature shows that migration's causes and effects have evolved throughout time (Tung, 2008; Zweig, Tsai, & Singh, 2021a, 2021b). This systematic literature study was carried out since there hasn't been a current comprehensive evaluation in this field. We clarify skilled migration nuances, which is much needed. Additionally, there is a dearth of comprehensive frameworks that identify and explain each

of these elements. Migration theories and prior studies have consistently linked economic considerations to international migration. It would be beneficial to specifically take qualified professionals like scientists, doctors, and engineers into account when analysing cross-border migration. Researchers are also interested in comprehending cross-border migration via the prism of behavior theories. As a result, we use Herzberg's (1968) and Maslow's (1948) theories as the foundation for our explanation of how human needs influence migration decisions and facilitate skilled migration.

Previous research has focused on developed countries that try to attract skilled professionals from developing countries to meet their human resource needs, while developing countries focus on halting the exodus. However, opinions about skilled migration have evolved in recent years (Tung, 2008). It is unwise to rely just on economic measures to prevent brain drain when a national-level environment, adequate rules, strong property rights, and research infrastructure may all play important roles (Zweig et al., 2021, 2021). Developing countries such as India and China, which initially focused on restricting brain drain, are now oriented toward brain gain by motivating migrants to repatriate. Henceforth, they are accruing the benefits, such as the transfer of technology, remittances, and network building for knowledge sharing. Similarly, developed countries such as the US (one of the top destinations for emigrants) that were encouraging immigration have framed stringent policies like restricting H–1B work visas to curb the inward movement of professionals (Anderson, 2022).

Thus, these changing dynamics indicate that cross-border mobility/migration of skilled professionals demands a deeper and inclusive understanding, particularly concerning the drivers and the outcomes of skilled migration. Recent studies have also emphasized reframing the construct for precision and clarity to differentiate between the intensity of problems and the storyline or narratives used to understand them (Hasselbalch, 2019). Notably, no specific review has been conducted on skilled migration in recent times. The study on brain drain among Nepalese students underscores the significant impact of economic incentives and favorable migration policies in driving emigration. Perceived economic benefits, higher education quality abroad, and supportive migration policies are the primary factors influencing students' decisions to leave Nepal.

2.2 Theoretical Review

Brain drains, the emigration of highly skilled professionals to developed countries, poses significant challenges to Nepal, particularly among its student population. Theoretical perspectives suggest that this phenomenon depletes Nepal's human capital, undermining economic development and exacerbating skill shortages. For Nepalese students, the allure of better educational and career opportunities abroad often leads to a permanent exodus, resulting in a loss of potential innovators and leaders crucial for national progress. However, some theories posit potential benefits, such as remittances and knowledge transfer from the diaspora. Nonetheless, the predominant view highlights the urgent need for Nepal to implement policies that enhance local opportunities and incentivize skilled individuals to contribute to national growth.

2.2.1 Human Capital Theory

Human Capital Theory, a pivotal concept in economics and social sciences, underscores the importance of individuals' skills, knowledge, and experiences as critical drivers of economic growth and development. This theory posits that investments in education and training enhance an individual's productivity and earning potential, which in turn benefits the broader economy (Becker, 1993). In the context of brain drain, Human Capital Theory provides a framework to understand the migration of skilled professionals and students from developing countries like Nepal to more developed regions, where they seek better opportunities and higher returns on their educational investments.

At its core, Human Capital Theory asserts that education is a form of capital investment, much like physical capital, that yields returns over time. When individuals acquire higher education and specialized skills, they increase their productivity and thus their potential income. This individual benefit translates into broader economic gains, as a more skilled workforce drives innovation, efficiency, and competitiveness within an economy (Schultz, 1961). However, this theory also illuminates the challenges faced by countries like Nepal, where the infrastructure and opportunities to fully utilize and reward such skills are often lacking. Consequently, many Nepalese students pursue education abroad and remain in host countries where their human capital can be more effectively utilized and rewarded. The migration of Nepalese students can be seen through the lens of Human Capital Theory as a rational response to disparities in the returns to education between Nepal and more developed countries. In Nepal, limited economic opportunities, political instability, and

inadequate infrastructure constrain the ability of individuals to fully leverage their educational qualifications (Pant & Sijapati, 2012). As a result, the potential returns on investments in higher education are significantly lower compared to developed countries where educational systems are better funded, and labor markets are more robust. This differential creates a powerful incentive for Nepalese students to seek education and employment abroad, where they can achieve higher incomes and better career prospects.

However, the implications of this migration extend beyond individual gains. For Nepal, the outflow of educated individuals represents a loss of human capital that could otherwise contribute to nat ional development. This phenomenon, commonly referred to as "brain drain," depletes the country's pool of skilled professionals, which is critical for addressing key development challenges and fostering economic growth (Adams, 2003). The sectors most affected by brain drain in Nepal include healthcare, education, and engineering, where shortages of qualified professionals hinder progress and exacerbate existing problems.

Moreover, the loss of human capital has long-term repercussions on Nepal's development trajectory. A reduced pool of skilled individuals limits the country's capacity for innovation and adaptation to new technologies, which are essential for competing in the global economy (Docquier & Rapoport, 2012). Additionally, the financial burden of educating individuals who then emigrate represents a sunk cost for Nepal, with the benefits of this investment accruing to the host countries instead. This dynamic underscore the importance of creating policies that not only retain talent but also attract back those who have migrated, thereby reversing the brain drain into a "brain gain."

Despite these challenges, Human Capital Theory also offers insights into potential strategies for mitigating brain drain and harnessing the benefits of skilled migration. For instance, policies aimed at improving the quality of domestic education, enhancing career opportunities, and fostering a conducive environment for professional growth can help retain talent. Additionally, engaging the Nepalese diaspora through initiatives that encourage knowledge transfer, investments, and collaborations can create pathways for the return of human capital (Kuznetsov, 2006). By aligning educational investments with national development goals and creating a supportive ecosystem for skilled professionals, Nepal can better leverage its human capital for sustainable growth.

In conclusion, Human Capital Theory provides a comprehensive framework for understanding the dynamics of brain drain, particularly among Nepalese students. While the migration of skilled individuals represents a loss of valuable human capital for Nepal, it also highlights the need for targeted policies that enhance domestic opportunities and leverage the potential of the diaspora. By addressing the root causes of brain drain and creating an enabling environment for human capital development, Nepal can transform this challenge into an opportunity for national advancement.

2.2.2 Brain Gain Theory

Brain Gain Theory provides an optimistic counter-narrative to the traditional notion of brain drain, suggesting that the migration of skilled individuals from developing to developed countries can ultimately yield significant benefits for the home country. This theory posits that the experiences, knowledge, and networks gained by expatriates abroad can be harnessed to promote economic development, innovation, and skill enhancement in their countries of origin (Hunger, 2021). In the context of Nepalese students, Brain Gain Theory emphasizes the potential advantages that can arise when students who have migrated for education and employment opportunities abroad decide to return or engage in activities that benefit Nepal, either directly or indirectly.

At the heart of Brain Gain Theory is the idea that the international mobility of talent need not result in a zero-sum loss for the home country. Instead, it can be a conduit for the transfer of valuable skills, advanced knowledge, and innovative practices back to the country of origin. Nepalese students who pursue higher education and gain professional experience in developed countries acquire expertise in fields such as technology, healthcare, engineering, and management. This accumulation of human capital can be pivotal when these individuals return to Nepal, bringing with them cutting-edge skills and global perspectives that can drive local innovation and economic growth (Saxenian, 2006).

Moreover, even if not all emigrant students return to Nepal, Brain Gain Theory highlights the importance of maintaining connections with the diaspora. The global Nepalese community can contribute to national development through various channels, including remittances, investment in local enterprises, collaborative research, and mentorship programs. For instance, diaspora networks can facilitate technology transfer, promote international trade, and support the establishment of start-ups in Nepal, leveraging the expertise and financial resources of expatriates (Kapur, 2022). This dynamic is particularly

relevant in the era of digital connectivity, where geographical barriers are increasingly irrelevant in the exchange of knowledge and resources. The role of government policies is crucial in realizing the potential of brain gain. Effective policies that create an enabling environment for returnees and diaspora engagement can significantly amplify the benefits of skilled migration. This includes providing incentives for returnees, such as tax breaks, grants for start-ups, and recognition of foreign qualifications. Additionally, establishing robust diaspora engagement strategies, such as creating platforms for networking and collaboration, can facilitate the flow of knowledge and investment back to Nepal (Ratha et al., 2021).

In the Nepalese context, recent initiatives reflect a growing recognition of the potential benefits of brain gain. The government and various non-governmental organizations have launched programs aimed at leveraging the expertise of the Nepalese diaspora. For instance, the Non-Resident Nepali Association (NRNA) has been instrumental in mobilizing the diaspora for development projects, promoting investment, and facilitating knowledge exchange. These efforts are critical in transforming the challenges of brain drain into opportunities for brain gain, fostering a more dynamic and resilient economy (Adhikari, 2023).

In conclusion, Brain Gain Theory offers a hopeful perspective on the migration of skilled individuals, emphasizing the potential benefits that such mobility can bring to the home country. For Nepalese students, the theory highlights the significant advantages of gaining education and experience abroad, which can be harnessed for national development through strategic policies and diaspora engagement. By fostering an environment that supports the return and participation of expatriates, Nepal can transform brain drain into a powerful engine for innovation and growth.

2.2.3 Social Capital Theory

Social Capital Theory, a concept rooted in sociology and economics, emphasizes the value of social networks, relationships, and norms that enable individuals and groups to achieve collective goals. This theory posits that social capital, much like physical or human capital, is a crucial asset that facilitates cooperation, trust, and mutual support within a community (Putnam, 2000). In the context of brain drain, Social Capital Theory provides a framework for understanding how the networks and connections of Nepalese students abroad can

influence migration patterns and potentially mitigate the adverse effects of brain drain through the creation and utilization of diaspora networks.

Central to Social Capital Theory is the notion that social networks provide members with valuable resources, such as information, support, and opportunities (Bourdieu, 1986). For Nepalese students, the presence of established networks in host countries, including family members, friends, and alumni associations, significantly influences their decision to migrate for education and employment. These networks offer crucial assistance in navigating the challenges of living and studying abroad, from finding housing and job opportunities to accessing academic resources and social support systems. The strength and density of these networks can thus make the prospect of studying and working abroad more feasible and attractive (Granovetter, 1973).

Moreover, the social capital accumulated by Nepalese students abroad can have significant implications for both the host and home countries. In host countries, Nepalese students contribute to diverse academic and professional communities, enriching them with their unique perspectives and skills. They also form new connections and relationships that can facilitate cultural exchange and mutual understanding. Importantly, these networks are not confined to national borders; they create transnational links that can foster bilateral collaborations and exchange of knowledge between Nepal and the host countries (Portes, 1998).

From the perspective of Nepal, the social capital of its diaspora can be a valuable asset for national development. Diaspora networks can play a pivotal role in mitigating the negative effects of brain drain by acting as bridges for knowledge transfer, investment, and technological exchange. For instance, Nepalese students and professionals abroad often remain connected to their homeland through various formal and informal channels, such as professional associations, cultural organizations, and online platforms. These connections enable them to share expertise, provide mentorship, and support initiatives that benefit Nepal (Levitt, 2001). This dynamic is particularly significant in fields such as healthcare, education, and technology, where the transfer of advanced skills and knowledge can have a transformative impact. Empirical research highlights the positive role of diaspora networks in facilitating development outcomes. A study by Saxenian (2005) on the Indian and Chinese diasporas in Silicon Valley illustrates how returnees and transnational professionals have contributed to the growth of the technology sectors in their home

countries by establishing new enterprises and fostering innovation. Similarly, Nepalese diaspora organizations, such as the Non-Resident Nepali Association (NRNA), have been active in mobilizing resources, expertise, and investments for various development projects in Nepal, demonstrating the potential of social capital to drive positive change (Adhikari, 2023).

Government policies and institutional support are crucial in harnessing the potential of social capital for national development. Policies that facilitate the engagement of the diaspora, such as dual citizenship, recognition of foreign qualifications, and incentives for returnees, can strengthen these transnational networks. Additionally, initiatives that promote diaspora participation in national development strategies, such as diaspora investment funds and platforms for collaboration between local and expatriate professionals, can enhance the impact of social capital (Rana, 2021).

Despite the potential benefits, there are challenges in leveraging social capital for development. Issues such as bureaucratic red tape, political instability, and a lack of infrastructure can hinder effective diaspora engagement. Addressing these challenges requires a concerted effort to create an enabling environment that supports the contributions of the diaspora while ensuring that their skills and investments are effectively integrated into national development plans (Kharel, 2022).

In conclusion, Social Capital Theory offers a valuable perspective on the dynamics of brain drain and the potential benefits of diaspora engagement. For Nepalese students, the social networks and connections formed abroad are critical in shaping their migration experiences and opportunities. By recognizing and leveraging the social capital of the Nepalese diaspora, Nepal can transform the challenges of brain drain into opportunities for innovation, knowledge transfer, and sustainable development. Strategic policies and institutional support are essential to maximize the contributions of the diaspora and ensure that the benefits of their social capital are fully realized.

2.2.4 Migration Systems Theory

Migration Systems Theory provides a comprehensive framework for understanding the complex and interrelated factors that drive migration flows, emphasizing the role of historical, economic, social, and political linkages between countries. This theory posits that migration is not a series of isolated individual decisions, but rather a system characterized by networks and feedback mechanisms that connect origin and destination

countries (Mabogunje, 1970). For Nepalese students, Migration Systems Theory elucidates how established pathways, relationships, and institutional connections facilitate and perpetuate their migration for education and employment abroad.

At the core of Migration Systems Theory is the concept that migration patterns are sustained and reinforced by pre-existing ties between countries, which can include colonial history, trade relationships, and cultural connections (de Haas, 2010). For Nepal, historical ties and economic interactions with countries like India, the United States, the United Kingdom, and Australia have established well-trodden paths for student migration. These relationships are further supported by institutional agreements, scholarship programs, and bilateral educational initiatives that make it easier for Nepalese students to access opportunities abroad (Gurung & Subedi, 2021).

Moreover, Migration Systems Theory highlights the role of social networks and diaspora communities in facilitating migration. Nepalese students often rely on networks of family, friends, and alumni who have already migrated to provide information, support, and resources for studying and living abroad. These networks reduce the risks and uncertainties associated with migration, making it a more viable option (Boyd, 1989). For instance, social networks can help students find housing, navigate administrative processes, and integrate into new academic environments, thereby reinforcing the migration system.

Feedback mechanisms are also critical in Migration Systems Theory. Successful migration experiences of earlier cohorts can lead to increased migration as positive outcomes—such as higher educational attainment and better job prospects—are communicated back to potential migrants in Nepal. This creates a self-perpetuating cycle where migration becomes a normalized and desirable pathway for achieving educational and career goals (Bakewell, 2014). Additionally, remittances and the transfer of knowledge and skills from the diaspora back to Nepal can influence local communities and economies, further embedding migration within the socio-economic fabric of the country.

Policy frameworks and institutional contexts in both origin and destination countries play significant roles in shaping migration systems. For Nepalese students, policies that facilitate international student mobility, such as visa regulations, recognition of qualifications, and post-study work opportunities, are crucial. Countries like Australia and Canada have tailored their immigration policies to attract international students, thereby becoming key destinations within the Nepalese migration system (Chalise & Bhattarai, 2020).

Recent studies underscore the dynamic nature of migration systems, noting that changes in political, economic, or social conditions in either the origin or destination countries can significantly impact migration flows. For example, the COVID-19 pandemic has affected global student mobility patterns, highlighting the resilience and adaptability of migration systems as students and institutions adjust to new realities (ICEF Monitor, 2022).

In conclusion, Migration Systems Theory offers a robust framework for understanding the migration of Nepalese students. By emphasizing the interconnectedness of historical ties, social networks, and institutional contexts, this theory explains how migration patterns are established and sustained. Recognizing these dynamics is essential for developing policies that support the beneficial aspects of migration while addressing its challenges. By leveraging the insights provided by Migration Systems Theory, policymakers can create more effective strategies to manage and optimize the migration of skilled individuals for the benefit of both origin and destination countries.

2.2.5 Innovation and Knowledge Spillover Theory

Innovation and Knowledge Spillover Theory posits that the diffusion of knowledge and innovation from one entity or location to another plays a crucial role in economic development and technological advancement. This theory highlights how the migration of skilled individuals, such as students and professionals, facilitates the transfer of cutting-edge knowledge, skills, and practices across borders, benefiting both the host and home countries (Audretsch & Feldman, 2004). For Nepalese students, studying and working abroad often means gaining exposure to advanced educational systems, innovative research, and professional practices, which they can potentially bring back to Nepal or share through transnational networks.

Central to this theory is the idea that geographic proximity and social networks enable the spillover of knowledge from universities, research institutions, and high-tech industries to other sectors and regions (Jaffe, 1989). When Nepalese students migrate to countries with robust innovation ecosystems, such as the United States, the United Kingdom, or Australia, they become part of dynamic environments where they can acquire state-of-the-art skills and engage in groundbreaking research. The knowledge and experience gained in these settings can later be transferred to Nepal through return migration, remote collaborations, or diaspora engagement, fostering local innovation and economic growth (Saxenian, 2005).

The spillover effects are particularly significant in technology and science-based sectors, where advancements often require a high concentration of expertise and resources. For instance, Nepalese students who study and work in fields like information technology, biotechnology, and engineering abroad can introduce new technologies, methodologies, and business models upon their return or through virtual collaborations. This can lead to the creation of new enterprises, improvement of existing industries, and overall enhancement of the local innovation landscape (Agrawal et al., 2006).

Furthermore, the theory underscores the importance of international networks in facilitating knowledge spillovers. Diaspora communities and professional networks enable continuous exchange of ideas and best practices, even if the individuals do not return permanently. For example, Nepalese professionals abroad can mentor local entrepreneurs, collaborate on research projects, and participate in knowledge-sharing platforms, thereby contributing to Nepal's innovation capacity from afar (Kerr, 2008).

Government policies play a crucial role in maximizing the benefits of innovation and knowledge spillovers. Policies that encourage the return of skilled migrants, such as favorable tax regimes, grants for start-ups, and support for research and development, can enhance the impact of returning professionals. Additionally, fostering connections with the diaspora through programs that facilitate remote collaboration and investment can further strengthen these spillover effects (Romer, 1990).

Recent studies highlight the significance of leveraging these knowledge flows for sustainable development. For instance, initiatives aimed at integrating the expertise of the diaspora with local innovation systems have shown promising results in various developing countries, including Nepal (Nepal Development Research Institute, 2023). These efforts are crucial in transforming the challenges of brain drain into opportunities for brain gain and innovation-driven growth.

In conclusion, Innovation and Knowledge Spillover Theory provides a valuable framework for understanding how the migration of Nepalese students can contribute to national development. By facilitating the transfer of advanced knowledge and fostering transnational networks, this theory underscores the potential for returning migrants and the diaspora to drive innovation and economic growth in Nepal. Effective policies and programs that support these processes are essential to fully harness the benefits of skilled migration.

2.3 Empirical Review

An empirical review involves systematically analyzing and synthesizing existing research studies and data to assess the evidence on a specific topic or phenomenon. This type of review focuses on collecting quantitative and qualitative data from various sources, such as academic journals, reports, and case studies, to draw comprehensive conclusions about the current state of knowledge. For instance, an empirical review of the impact of brain drain on Nepal might examine data on the number of Nepalese students studying abroad, their fields of study, their return rates, and the subsequent economic and social effects on Nepal. The goal is to identify patterns, correlations, and causative relationships that can inform policy and practice, offering a robust understanding grounded in actual research findings (Harrison et al., 2020). By integrating diverse empirical evidence, such reviews provide a nuanced and evidence-based perspective that can guide future research and decision-making.

2.3.1 Summary of Empirical Review of International Journals and Articles

Ziguras and Gribble (2015) examined the Singapore has experienced a high rate of outbound degree mobility with around 1 in 10 higher education students currently studying outside the country according to UNESCO figures. The presence of a sizable number of graduates with international education has helped Singapore's economic development strategy succeed, making it a major Asian hub for knowledge-intensive sectors and internationalized services. But a sizable portion of Singaporean students choose not to return home after finishing their education, and the government has been concerned about the ensuing "brain drain" since the late 1990s. The Singaporean government has employed four techniques to solve this issue, which are examined in this article: Lowering the number of students leaving the country by enhancing domestic study alternatives, encouraging graduates to return home, interacting with the Singaporean community abroad, and bringing in new international students to join the workforce. The steps taken to promote each of these strategies seem to have had some success over the past ten years, notwithstanding the paucity of data. Although the conditions in each sending nation are unique, Singapore serves as an example of the kinds of doable policies that are successfully implemented by governments to lessen the adverse effects of student emigration.

Baruch et al. (2017) examined the brain drain is a phenomenon in which people of a high level of skills, qualifications, and competence, leave their countries and emigrate. When students from developing nations study in rich nations and choose not to return home following their studies, this is a significant example of brain drain. In a sample of 949 foreign management students studying in the US and the UK, we looked at the factors that led these individuals to choose to remain in their home countries. The findings are consistent with a three-factor model of the factors influencing this tendency. Students' plans to stay are influenced by a variety of factors, including their impressions of labor markets and ethnic differences, how well they acclimatize to the host nation, and the relationships their families have both there and back home.

Rasamoelison et al. (2021) analyzed the number of students flowing from low-income countries to high-income countries has grown over the past several decades but is likely to fall substantially in the coming years due to the coronavirus pandemic. It can calculate the pre-pandemic effects of student migration from 122 low- and middle-income countries to high-income, French- and English-speaking countries on the economic growth of the sending countries in order to estimate the possible effects of the coronavirus-induced reduction in the international flow of student migrants. We find positive and statistically significant effects of student migration on per capita GDP in sending countries, addressing the possible endogeneity of student-migrant flows through the use of region fixed-effects and instrumental-variables estimators. These results hold up well to various time lags and get stronger with time. According to our findings, student migrants have a minor but significant influence on the immediate economic development of their home nations. We find evidence of "incentive effects" for students travelling to English-speaking nations, as well as evidence of how student migration flows influence interest in politics and democratic political systems in the sending countries, when it comes to the mechanisms through which student migration flows can influence the development of the home countries.

Khan (2021) analyzed the international mobility of academics and researchers is important for their career. But as the population ages, there is a growing concern about the academic brain drain the exodus of academics especially in Europe. The problem of brain drain has primarily been studied quantitatively, with results that are typical and do not delve into the underlying causes. This report offers a fresh understanding of the underlying factors causing the academic brain drain in Europe by synthesizing qualitative research published

over the course of two decades, from 2000 to 2020. Following a thorough analysis of the qualitative literature, it was determined that five reasons could be responsible for the exodus of human capital. Among these are: (1) appealing compensation outside of Europe; (2) short-term fixed contracts for researchers in their early careers; (3) unethical hiring practices; (4) alluring immigration policies; and (5) the covert function internationalization policies play in promoting long-term mobility.

Vega-Munoz et al. (2021) examined the scholars had been documenting the Brain Drain phenomenon producing scientific literature for more than 50 years. The literature surrounding this idea has accelerated its growth path and progress after thirty years of gradual but steady advancement, in keeping with the ninth sustainable development goal, which is to "Build resilient infrastructure, promote sustainable industrialization, and foster innovation." The objective of this essay is to delineate the prevailing theoretical frameworks for the examination of the issue of worldwide migration of advanced intellectual human capital. Using a corpus of 1212 publications indexed to the JCR-Woos from the Social Sciences, this study applies a scents metric methodology. The study's time frame spans from 1965 until 2020. In this work, many disciplines' studies of the brain drain idea during the past 55 years are examined. The Journal Citation Report (JCR) index's 99 categories are covered in this report. The findings indicate that there is a critical mass of scientific research on the subject of brain drain. The analysis combines some new writers with classic works and displays theme tendencies at the sources and discourses. Theoretical developments and the emergence of new researchers force a refocusing of analysis beyond highly developed nations. Such a shift presents a fresh challenge to researchers examining how the brain drain affects the periphery of knowledge generation.

Mok et al. (2022) analyzed the international education and international student mobility are becoming increasingly popular in the era of globalization, which has triggered discussions on brain drain, brain gain, and brain circulation. Nevertheless, the COVID-19 pandemic and the current geopolitics have had a substantial impact on international student mobility. The latter has particularly harmed China's diplomatic ties with the United States and its Western allies. A reverse trend of Chinese international students opting to return home in recent years against the worsening relations between China and some major Western powers can be observed in light of the increasing complexity closely linked to how international politics affect international learning and student mobility. In this chapter, the ambitions of Chinese high-level individuals who graduate from big abroad colleges to

further their careers in mainland China are examined in the context of a wider political economy. More precisely, this chapter looks at the general attitudes that top talents have towards China and other nations from their points of view. For the purpose of advancing their careers, high-level talents' selected universities and states or areas receive extra consideration. This chapter examines the policy implications for talent attraction and retention for the GBA, based on an analysis of the major survey data produced by a research project at Peking University.

Mittelmeier et al. (2022) examined the outward migration of skilled migrants has disproportionally affected the Global South, particularly in countries in Africa, producing what is commonly referred to as ‘brain drain’. The aspirations of international students to migrate in the future who represent skilled migration have received a great deal of attention in this literature. Though there are more and more options for internationalizations at a distance where students study online or remotely from an institution located "abroad" many earlier works still presume that obtaining an international education requires actual mobility. Using a questionnaire of 607 South African, Namibian, and Zimbabwean students, this study has uncovered the future migration intentions of students enrolled in online distance education programs in relation to four sets of factors: academic and social adjustment, educational and work experience, socio-economic variables, and individual demographic characteristics. Our results paint a nuanced picture of the future migration intentions of international distance learners, with notable variations observed amongst students according to demographic factors, socioeconomic position, and place of origin. These results are especially pertinent now that online distance learning is becoming more and more popular in the wake of the COVID-19 pandemic.

Lanko (2022) examined the emigration of skilled and able workers from Russia markedly increased in the last five years, prompting Russian scholars to reassess the phenomenon of brain drain, its definition, scope, consequences and causes. According to this article, recent discussions have focused a lot on the alleged link between the growing 'brain drain' from Russia and the internationalization of Russian higher education. This study concludes that, despite the obvious concern among the Russian academic community about the relationship between internationalization and brain drain, emigration is still seen as the ideal option for a skilled and able individual. This conclusion is drawn from an analysis of Russian scholarly articles and transcripts of interviews with Russian educators directly involved in internationalization. Due to their conflicting views on the "brain drain," some Russian

academics use it as an excuse to oppose internationalization, citing a link between the two. On the other hand, others openly and publicly advocate for internationalization as a way to stop emigration. Such views have contributed to internationalization's survival in the backdrop of contentious educational reforms that Russia has been implementing since the 1990.

Wong and Guo (2023) analyzed the growing importance of transnational and diasporic communities “embedded” in more than one country. This paper on Chinese talent mobility in the diaspora, with particular emphasis on the motilities between China and OECD nations, adopts the integrated theoretical framework of transnational social motilities. We examine developing trends and patterns of highly skilled Chinese transnational talent movement by looking at macro migration data inside the OECD. We follow the trajectory of China's brain gain, brain drain, and brain circulation in OECD nations over the past 40 years in light of the country's growing economic influence and the corresponding expansion of a Chinese transnational diaspora. In the new economy, Chinese talent mobility is comprised of "transnational circuits" that are defined by the flow of people, products, information, and expertise. The new modality of "circulation" is theorized in this piece in terms of international social motilities.

Nadir et al. (2023) examined the exodus of educated or professional individuals to another nation, industry, or field, typically in search of a higher salary or living standard. Our goal was to investigate the causes of medical students' post-graduation departures, the implications for Pakistan's socio-medical landscape, and potential solutions. For the current academic year 2021–2022, 420 undergraduate medical students of both genders from two distinct medical institutions in Pakistan participated in a cross-sectional survey after gaining approval from the ethical committee. The primary data was collected using a structured questionnaire. The sample was gathered using the non-probability sampling technique. SPSS was used to analyse the data. 280 (66.66%) of the 420 medical students, both male and female, wish to continue their career in Pakistan, while 140 (33.3%) intend to depart after graduation. Furthermore, the majority of medical students reported pleasure with living in Pakistan when asked about the amenities provided to Pakistani doctors throughout their training. Nonetheless, the United States ranked highest on the list of countries where medical students would choose to immigrate. While there are several factors influencing doctors' immigration decisions, most students believe that low compensation and long hours are the primary causes of subpar patient care and inadequate

training. By making improvements to the compensation and service system, this might be avoided. This poll indicates that one in three medical students' hopes to relocate abroad after graduation due to inadequate management and resource availability, which has a negative impact on Pakistan's socio-medical situation. Therefore, in order to stop brain drain, it is critical that Pakistan's health officials start campaigns to address the problems encountered by doctors and medical students.

Bhardwaj and Sharma (2023) examined the foundation of organizations and knowledge-based economies is widely considered to be human capital and knowledge workers. The literature on skilled migration, brain gain, and brain drain resulting from the cross-border movement of trained professionals is summarized in this review. The study includes 75 papers, synthesizes findings, and creates a conceptual framework for those who facilitate skilled cross-border movement, which causes both brain gain and brain drain. In addition to providing the framework for Maslow's hierarchy of needs theory and Herzberg's two-factor theory to explain the phenomenon of skilled migration, we also support earlier theories on international migration that cite wage differentials, employment, better earnings, and family life as reasons for migration. The suggested conceptual model clarifies the consequences of brain gain and brain drain, providing a foundational framework for future research.

Labrianidis et al. (2024) examined potential differences in socioeconomic status (SES) and emigration patterns between Greek international students (IS) and non-international students (non-IS) and their relationship to the brain drain from Greece. The study offers comprehensive data on the SES and mobility trends of all Greek PhD holders by drawing from a special database. In addition, a human capital and socioeconomic index-based individual-level SES index is developed to calculate the extent of the brain drain in terms of the SES that left the country between 1,985 and 2,018. To begin with, Greek IS have better economic, professional, and educational standing than Greek non-IS. Additionally, they have a more global profile because they are more likely to stay overseas to look for work after graduation. Secondly, the extent of the brain drain is higher when considering SES individuals who left the country (22.5% of the total) than when considering those who relocated abroad (13.4% of the whole). In particular, the SES that leaves Greece with an extra Greek skilled emigrant (i.e., an extra IS and non-IS living overseas) is 1.1 times higher than the SES that stays in Greece with an extra non-IS living there.

Table 1

Summary and Empirical Review of International Journal and Articles

Authors	Objectives	Variables	Methodology	Findings
Ziguras and Gribble (2015)	To examine the Singapore has experienced a high rate of outbound degree mobility.	Migration, requirement, education are the independent variables and brain drain is dependent variable.	Likert scale, correlation and regression model were used to present data.	The case of Singapore is illustrative of the types of practical measures that are effectively adopted by governments to moderate the negative impacts of student emigration.
Baruch et al. (2017)	To examine the brain drain is a phenomenon in which people of a high level of skills, qualifications, and competence, leave their countries and emigrate.	High level of skills, qualifications, and competencies and emigrate are the independent variables and brain drain dependent variable.	Descriptive statistics, correlation and regression analysis were used to present data.	The results support a three-fold model of factors that influenced this inclination. Students' perceptions of ethnic differences and labor markets, their adjustment process to the host country, and their family ties in host and home countries all affect their intention to stay.
Rasamoelison et al. (2021)	To analyzed the number of students flowing from low-income countries to high-income countries.	Brain gain, international migration, education and GDP growth are the independent variables and Brain drain is dependent variable.	Fixed-effects and instrumental-variables estimators were used to present data.	The potential endogeneity of student-migrant flows, we find positive and statistically significant effects of student migration on per capita GDP in sending countries. These findings are robust to different time lags, and are increasing over time. Our results indicate that student migrants have a modest but meaningful impact on the short-run economic growth of their home countries.
Khan (2021)	To analyzed the international mobility of academics and researchers is important for their career	Salaries, career, recruitment procedures, migration polices are independent variables and brain drain is	Quantitative analysis, correlation and regression analysis were used to present data.	The issue of brain drain has been addressed usually through quantitative studies that fail to explore the in-depth reasons behind it, and present standard outcomes. Through a synthesis of qualitative literature over two

		dependent variable.		decades (2000–2020), this paper presents a new perspective of the root causes of academic brain drain in Europe.
Vega-Muñoz et al. (2021)	To examined the scholars had been documenting the Brain Drain phenomenon producing scientific literature for more than 50 years	Intellectual capital, international migration, cross-border cooperation network and social sciences are the independent variables and Brain drain is dependent variable.	Liikert scale, correlation and regression analysis were used to present data.	The major finding this study new scholars and theoretical trends lead to refocused analysis beyond countries with a high development level. Such movement constitutes a new challenge in this line of research toward studying the effects of the brain drain in the peripheral areas of knowledge production.
Mok et al. (2022)	To analyze the international education and international student mobility are becoming increasingly popular in the era of globalization, which has triggered discussions on brain drain, brain gain, and brain circulation.	Education, political economy, globalization are the independent variables and Brain drain is the dependent variable.	Correlation analysis and regression analysis were used to present data.	The major finding shows that international student mobility has been significantly not only by the outbreak of the COVID-19 pandemic but also by the new geopolitics clearly adversely influencing the diplomatic relationships between China and the USA with its allies in the West.
Mittelmeier et al. (2022)	To examine the outward migration of skilled migrants has disproportionally affected the Global South, particularly in countries in Africa.	International students, skilled migration, physical mobility, education are independent variables. Brain drain is the dependent variable.	Demographic Variables, descriptive statistics and regression analysis were uses to present data.	These findings have particular relevance following the increasing shifts to online distance learning following the COVID-19 pandemic. Complex picture of international distance students' future migration intentions and significant differences between students based on country of origin, socioeconomic status, and demographic variables.

Lanko (2022)	To examine the emigration of skilled and able workers from Russia markedly increased in the last five years, prompting Russian scholars to reassess the phenomenon of brain drain.	Migration, education, support international are independent variables and brain drain is the dependent variable.	Likert scale, correlation and regression model were used to present data.	This ambivalent attitude towards `brain drain' has created a situation where some Russian academics use it to justify their resistance to internationalization assuming a causal relationship between the two, while others, by word and deed, support internationalization as a means of curbing emigration.
Wong and Guo (2023)	To analyze the growing importance of transnational and diasporic communities "embedded" in more than one country.	Social mobilities, talent mobility, economy are the independent variables and brain drain is the dependent variable.	Liikert scale, correlation and regression analysis were used to present data.	The major finding shows that rising economic power and the concomitant growth of a Chinese transnational diaspora, we trace the trajectory of China's brain drain, brain gain and brain circulation in OECD countries over the past forty years.
Nadir et al. (2023)	To examine the exodus of educated or professional individuals to another nation, industry, or field, typically in search of a higher salary or living standard.	Immigration and social media are the independent variables and brain drain is the dependent variable.	Descriptive statistics, correlation and regression analysis were used to present data.	As a result, it is important for Pakistan's health officials to launch campaigns to address the issues faced by medical students and physicians in order to prevent brain drain.
Bhardwaj and Sharma (2023)	To examine the foundation of organizations and knowledge-based economies is widely considered to be human capital and knowledge workers.	Skilled migration, brain gain, professional are the independent variables and brain drain is the dependent variable.	Demographic Variables, descriptive statistics and regression analysis were uses to present data.	The results shows that model proposed elucidates the brain drain and brain gain outcomes, thereby surfacing a formative base for future research agenda.
Labrianidis et al. (2024)	To examined potential differences in socioeconomic status (SES) and emigration patterns between Greek	PhD Holders, international students, migration are the independent variables and brain drain is	Liikert scale, correlation and regression analysis were used to present data.	The results shows that the magnitude of the brain drains in terms of SES emigrated abroad (22.5% of the total) is greater than in terms of individuals who moved abroad (13.4% of the total).

	international students (IS) and non-international students (non-IS) and their relationship to the brain drain from Greece.	the dependent variable.	Specifically, the SES that outflows with an additional Greek skilled emigrant (that is, an additional IS and non-IS residing abroad).

2.3.2 Summary of Empirical Review of Nepalese Context

Kabbash et al. (2021) investigated the reasons for Egyptian medical students and young physicians wanting to emigrate. In this cross-sectional survey, which took place between February and April 2019, 711 fifth- and sixth-year medical students as well as 174 residents from Tanta and Kafrelshiekh, two medical universities in Egypt, participated. Data on socio demographic characteristics, emigration desire, and reasons for emigration were gathered via a questionnaire. The majority of participants (89.4%) believed that their pay did not align with the hazards or working hours they faced, and they intended to immigrate. Of the participants, about half (52.8%) had a part-time job in a private hospital. Just 4.9% of participants said the nation valued them. 40.2% of participants expressed dissatisfaction with their relationship with coworkers, whereas 75.9% of participants expressed dissatisfaction with their interaction with patients. Of the participants, 55.5% reported verbal abuse and 35.4% reported physical assaults. The majority of those who expressed a desire to leave the country (85.1%) stated they would reconsider if changes were made in the health sector. Compared to students, residents tended to have less negative attitudes about job and professional aspects. In conclusion, doctors move abroad in search of better employment opportunities and higher pay. In order to stop Egyptian doctors from leaving the country, a retention policy must be created. Key words: Egypt, emigration, doctors, workplace, and incentive.

Gowda (2022) analyzed the migration of highly skilled or educated people from their home country to other locations across the world. The concept of conditional or bonded scholarships is one of the current tactics to counteract the brain drain of medical students and graduates from less developed nations. Though this perspective focusses on Nepal and Malaysia as developing countries, conditional scholarships have been adopted all around the world with varying degrees of effectiveness in slowing down brain drain, including rich

nations like the USA, Kuwait, and Australia. Bonding is not a perfect solution, but it has shown to be successful in minimizing the emigration of medical graduates from developing to developed nations. In this policy study, we contend that restricting the mobility of recent medical graduates may not be morally acceptable. The fact that bonding schemes exacerbate the wealth disparity in emerging countries is another issue with them. The majority of nations that enforce this mandatory duty after graduation provide an option to break free from the bond by paying a sum of money that might cover the price of their undergraduate medical school. The issue emerges when more affluent graduates are able to cover this expense and migrate to nations with superior prospects, resources, and wages while less fortunate students stay in their native countries. An examination of the elements that drive medical graduates to relocate to other nations from their native country is provided.

Mishra (2023) examined the migration of skilled and educated labor, is a painful reality for developing countries like Nepal. There are several pull and push factors that contribute to brain drain, such as scarce employment opportunities, greater living standards, higher incomes, access to cutting-edge technology, and more stable political environments in industrialized nations. Lack of trained and skilled labor slows down a nation's overall development and impedes the growth of its industrial sector. The editorial viewpoint offers a thorough analysis of the causes, consequences, and potential remedies of the brain drain phenomena. The editorial viewpoint emphasized that in order to solve the problem and turn brain drain into wisdom gain, effective governmental solutions are required. Management's function in controlling brain drain is essential to the nation's long-term economic expansion and development. By creating and enforcing rules to draw in and keep qualified workers, funding R&D, launching returnee initiatives, tackling socioeconomic issues, and working with the government and other stakeholders, management may help solve the problem. Policymakers, academics, and other stakeholders must take immediate notice of and action on the terrible reality of brain drain in Nepal. By implementing the necessary changes to address the underlying causes of brain drain, Nepal will be able to capitalize on the skills and knowledge of its highly qualified workforce and meet its objectives for sustained economic development. Keywords: Cause, Impact, Effect, Management, Brain Drain into Wisdom Gain.

Khatiwada (2023) examined the migration is the process of change in usual place of residence which is taking place both as internal and international having diverse short-term and long-term outcomes. In order to investigate these results, this article primarily examines Nepal's foreign migration rates and factors. This paper first describes the rigorous technique of calculating migration rate using secondary data sources, then explains why verified data sources are necessary to obtain authentic statistics. The social, demographic, economic, environmental, and political factors that influence migration are then highlighted in the study. Certain factors largely impact migration decisions in the regions of origin, whereas other factors motivate people to migrate in search of improved living conditions. Additional push and pull variables have also attracted the attention of policy makers, primarily the expanding student migration as the "pull" and disasters and wars as the "push." As a labor supplier to Malaysia and the Gulf countries, Nepal's remittances account for over one-third of the country's GDP. Issues pertaining to subsistence and the pursuit of life have been the typical occurrences examined as catalysts in this piece. According to the paper's conclusion, there is no correlation between the different kinds of migration drivers and their effects. For whatever reason, Nepal is migrate in search of better economic and job possibilities.

Rijal et al. (2023) identified but Muscle drain started since back to 200 years brain drain's momentum started since 80's decade. Twelve universities and five academic medical facilities make up the 1440 Higher Education Institutions (HEIs) that are now operational, with more being added to the list. 460826 professionals are being produced by all of these HEIs, while 2350 higher level medical professionals are produced by Medical Academics alone. From January to July of 2022, 2409 pupils received a letter from the Ministry of Education stating that they had no objections. The key element causing brain outflow was discovered to be push-pull factors, which are substantially linked with p-value=0.001. Finding accurate data was challenging because there is no mechanism in place to track brain drain. The government would have lost 10.85 to 18.2 million USD if the 350 MBBS students who receive government study subsidies left the nation, and the countries that experience brain drain do tend to attract young professionals. The study indicates that the cost of brain drain is incalculable. The government needs to have a well-thought-out plan in place to keep experts in the nation for future growth.

Pokharel et al. (2024) investigated how the brain drain of Nepalese students is impacted by globalization. Nowadays, brain drain is a significant concern for every household in developing countries like Nepal, as students often relocate to developed nations for academic purposes. Accordingly, the research set out to ascertain the reasons behind Nepalese student brain drain and explore the ways in which globalization influences this phenomenon. In this mixed-methods study, primary and secondary sources of data were used. The study included both analytical and descriptive research methods. In the globalized world, poor countries like Nepal have suffered more negative consequences from the brain drain than positive ones. The brain drain is one of the biggest problems that globalization has caused for Nepal. This study emphasized how important it is that the national development planners, development partners, and government of Nepal recognize and deal with the problem of brain drain. It emphasized the need for targeted marketing and sustainable development activities aimed at enhancing local professional and educational facilities in order to keep Nepalese students in the area and lessen the negative effects of brain drain. More students are leaving their home country to seek higher education in industrialized nations, hoping to continue their education while gaining useful experience and employable skills that will aid them in the global labor market. The purpose of this essay was to examine the consequences of globalization as well as the causes of Nepal's brain drain. Open-ended questions from in-depth interviews with students preparing for the International English Language Testing System (IELTS) were utilized to collect data. This paper also emphasized and identified the social, political, economic, and institutional components that were critical for implementing a campaign to materialize the idea of a "prosperous Nepal-happy Nepali" in a globalized society and for fostering the brain circulation or brain linkage sustainable development plan policies.

Thakur (2024) analyzed the phenomenon of brain drain among skilled IT professionals in Nepal, aiming to understand the factors influencing their migration decisions. The study's main focus is on the challenges faced by Nepal's IT workforce and the factors that led to their relocation in this more interconnected world. Using a rigorous technique with 185 IT specialists, a multiple regression model is applied with parameters such as Employment Prospects, Economic Uplifts, Education, and Personal Ambition, with Brain Drain as the dependent variable. For readability, linear regression's simplicity is chosen. Study Pearson correlation coefficients show that these factors and Brain Drain have meaningful associations. Four presumptions support the idea that employment prospects, economic

uplifts, education, and personal ambition influence migration intention. The study shows how financial factors have a major impact on migration patterns in the IT industry, giving corporate executives and policymakers valuable information to help them create targeted talent retention plans. This study encourages more discourse on the intricate problems associated with brain drain in order to facilitate informed decisions and effective actions for the sustained growth of Nepal's IT sector.

Rizwan (2024) examined the migration of skilled professionals to improve their quality of life and living standards where better salary packages, advanced learning opportunities and healthier working environment are considered major driving forces. For nearly the past 20 years, there has been cause for grave concern over the phenomena of health professionals leaving developing countries for wealthy ones in search of a more environmentally friendly future. Approximately 56% of all foreign immigrant doctors are from developing nations, and of those, 45% are from three countries: Pakistan, India, and the Philippines. These immigrants are shifting to four high-income nations. There is a severe lack of medical competence in their home countries as a result of immigration. Investigating the fundamental causes of the current immigration of doctors to Pakistan is necessary.

Abdou and Hagrass (2024) aimed to assess nurses' awareness about brain drain and its determinants factors at Main Mansoura university hospital. Because of the long-term effects on health systems in developing nations, health experts are leaving their fields and moving abroad in search of better possibilities. This phenomenon is known as brain draining and resettlement. The primary goal of this study was to evaluate the Main Mansoura University Hospital nurses' knowledge of brain drain and its contributing elements. The Main Mansoura University Hospital served as the study's site. There was use of a descriptive correlational study design. A convenience sample of ninety-five nurses was employed. The Brain Drain Awareness Questionnaire and the Brain Drain Determinants Factors Questionnaire were the two instruments utilized. The study's conclusions showed that nurses were well-informed about brain drain. The total brain drain determinants, push and pull variables, and nurses' awareness of brain drain were found to be statistically significantly positively correlated. The study's nurses had a moderate perception of these elements. The nurses' awareness of brain drain may be significantly predicted by push and pull factors separately by 65.2% and 66.7%. Supplying the required tools and materials,

fostering a positive work atmosphere, and providing opportunities for continuing education and professional development.

Ulupinar et al. (2024) examined the emigration of scientists and other educated professionals from a low- or middle-income country to a high-income country for work. This tendency has been stronger in recent years, especially in the field of health care. According to earlier research conducted on nurses and nursing students, the majority of migration happens from lower- and lower middle-income to higher-income nations. The purpose of this study was to investigate the perceptions of brain drain held by Turkish nurses, nursing scholars, and nursing students, as well as the contributing causes to these perceptions. A mixed-methods research strategy was employed in the study. 1,018 people took part in the study's quantitative portion. Twenty-six volunteers from the broader sample participated in focus group interviews that were used for the qualitative portion. Between June and August of 2022, information was gathered via an online questionnaire, the Brain Drain Attitude Scale, and a semi-structured interview guide. 84.3% of participants overall said they wished to live and work overseas. Economic concerns were cited as the primary cause of the over 95% of respondents who said there was a risk of brain drain in the nursing profession. Age and years of work experience grew, while the inclination towards brain drain declined. Compared to nursing academics, brain drain tendencies were higher among nurses and nursing students. Participants in focus groups expressed concern that, while cultural adaptation can be challenging for nurses in the migrant-receiving country, brain drain could result in losses in the qualified nursing workforce and increase the workload for the remaining nurses in the migrant-sending country. One major, ongoing issue in the nursing profession is brain drain. According to this study, there was a strong desire to work overseas among Turkish nurses, nursing students, and nurse academics. Additionally, all three groups had high brain drain tendency scores. There are detrimental effects of brain drain on both the countries exporting and receiving migrants. These results can be used to guide the creation of programs meant to stop or lessen the nursing brain drain.

2.4 Research Gap

Previous studies on brain drain in Nepal have traditionally emphasized economic conditions and political instability as the main reasons for emigration. However, recent reviews suggest that the socio-economic factors driving brain drain are now more complex and varied. There is a significant gap in understanding how new socio-economic variables, such as global digital connectivity, shifts in the global labor market, and the rising importance of higher education quality, specifically influence Nepalese students' decisions to pursue education and careers abroad. Assessing the impact of brain drain has typically focused on remittance flows and overall labor market effects. However, recent research indicates the need for more detailed and comprehensive impact assessments. The literature lacks sufficient analysis of the long-term effects of brain drain on Nepal's innovation capacity, the quality of its educational institutions, and socio-cultural changes within communities. Future research should aim to develop more advanced tools and methodologies to accurately measure these impacts, taking into account both short-term and long-term consequences.

Earlier studies mainly focused on traditional reasons for emigration, such as better career opportunities, higher wages, and improved living conditions. However, recent reviews indicate a shift in these motivations, with increasing emphasis on personal development, global exposure, and the pursuit of specialized academic fields that are either unavailable or underdeveloped in Nepal. There is a notable gap in the literature concerning the evolving aspirations of Nepalese students and how these are shaped by international educational trends and cultural exchanges. Gaining a deeper understanding of these changing motivations can shed light on current emigration patterns and aid in developing targeted policy interventions.

While various policy responses have been suggested to mitigate brain drain, such as improving local employment opportunities and enhancing educational infrastructure, there has been limited evaluation of their effectiveness. Recent reviews emphasize the need for a more critical examination of these policies and their real-world outcomes. There is a lack of evidence-based analysis regarding which strategies have successfully retained talent and which have not. Additionally, comparative studies examining similar contexts in other countries are needed, as they could offer valuable insights for Nepal's policy framework.

Therefore, bridging these research gaps requires a dynamic and multifaceted approach, integrating new socio-economic trends, evolving student aspirations, precise impact assessments, and robust policy evaluations. By addressing these gaps, future research can contribute to more effective strategies to manage brain drain and its impacts on Nepalese students.

CHAPTER III

RESEARCH METHODOLOGY

Research methodology describes the methods and process applied in the entire aspect of the study. Research methodology is the various sequential steps to be adopted by a researcher in studying a problem with certain objectives in view. This chapter provides insights about the methodology and research design used in this study. Furthermore, population for the study is defined in this segment along with the samples used. The method of data collection and data analysis used in this study are explained in this chapter. This chapter is mostly about analyzing the data and explaining what the study's findings mean in order to reach the goal of the study. It's mostly a study of research design, population, and sample size, tools used to collect data, sources and methods of data collection, and describes the methods adopted for analyzing data.

3.1 Research Design

Research design is a conceptual framework within which research is conducted. Research design is plan for the collections and analysis of data. The study is based on descriptive and causal comparative research design that looks the role of brain drain and its impact on Nepalese students in Kathmandu valley to obtain complete and accurate about brain drain and its impact on Nepalese students along with their factors. The study has reviewed the past experiences and seeks to draw lessons from the review. Gained an access in the opinions, behaviors, and characteristics of given beneficiaries and evaluate these activities.

3.2 Population and Sample

Population refers to the entire group of people, events or things of interest that a researcher wishes to investigate. The total numbers of clients who are directly benefited by brain drain and its impact on Nepalese students in Kathmandu valley is the total population of this respective study. However, the study approaches around 262 respondents which is considered as standard sample size. The sampling technique used in the study is purposive sampling method, where clients of brain drain and its impact on Nepalese students are selected based on their specific characteristics or knowledge relevant to the research question.

3.3 Nature and Sources of Data

The research study mainly based on primary data collected through structured questionnaire which is based on conceptual framework by respondent and interview. The data is collected from Kathmandu valley through administration of questionnaire. The questionnaire was designed using "Google Forms", and was sent to respondent through physical printed form and instant messaging platforms.

3.4 Data Collection Instruments

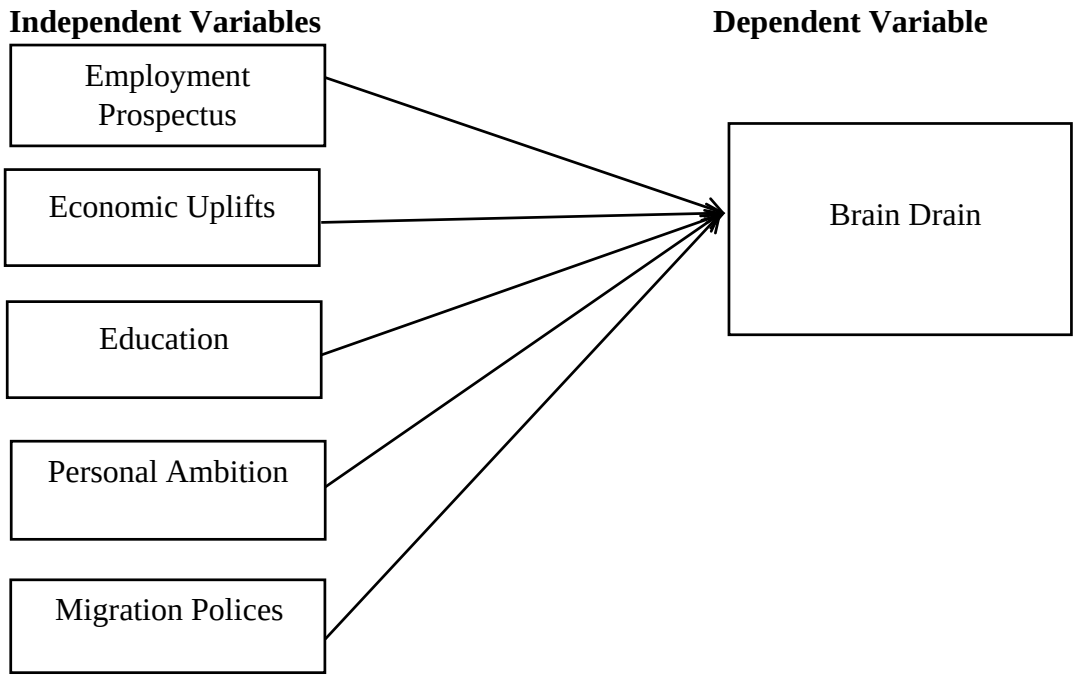
The questionnaire was divided into two major sections. The first section is related to the demographic characteristics of the respondents. This includes gender, age group, family structure, marital status, and education status. The second section of the questionnaire was related to variable of women empowerment in economic and social empowerment dimensions namely income level, ownership of assets, family support, decision making power and freedom of mobility. The respondents are being reformed to indicate their degree of conformity with specified statements using five-point scale anchoring as (1-strongly disagree, 2-disagree, 3-neutral, 4-agree and 5-stronly agree).

3.5 Methods of Analysis

The collected data have been analyzed by using statistical tools with the help of Statistical Package for Social Science (SPSS). Descriptive analysis such as frequency, percentage, mean, and standard deviation has computed and analyzed. Similarly inferential analysis has computed and analyzed like Simple correlation coefficient has been used to know the relationship between independent variables and dependent variable, Regression analysis and ANOVA test, and Reliability of data is tested through Cronbach's alpha.

3.6 Research Framework and Definition of Variables

The women empowerment is influenced by so many factors such as economy security, self-esteem, contribution of family income, mobility, income level, economic power, family support, ownership of assets, education level, training and education skill,, family decision making, legal awareness, economic decision making etc. However, in this study income level, ownership of assets, family support, decision making power and freedom of mobility being considered as independent variables whereas women empowerment in terms of economic and social dimensions considered as dependent variable.



Source: Jha et al. (2024) & Khan (2021)

Figure: The Conceptual Framework

3.6.1 Definition of Variables

Employment Prospectus

Brain drain significantly impacts the employment prospects of Nepalese students and the country's overall development. Many talented and educated individuals leave Nepal in search of better opportunities abroad, driven by factors such as limited job opportunities, political instability, and inadequate infrastructure. This migration results in a loss of skilled human capital, which is critical for the nation’s development. For instance, Adhikari (2020) notes that a substantial portion of Nepalese youth seek employment in countries like the United States, Australia, and Canada, creating a void in crucial sectors such as healthcare, education, and technology. This exodus hampers economic growth and development efforts, leaving Nepal with a diminished pool of skilled professionals who could otherwise contribute significantly to the nation’s progress.

The impact of brain drain on Nepalese students is profound, as the departure of top graduates intensifies competition for the limited quality jobs available within the country. Those who remain often face underemployment or unemployment, as noted by Sharma (2019), who highlights the skills gap that results from the loss of experienced professionals. This situation deprives students and young professionals of mentorship opportunities, exacerbating the disparity between the education system and the job market requirements. As K.C. (2018) points out, to mitigate these effects, there is an urgent need for policy interventions focused on enhancing domestic job opportunities, improving educational quality, and creating a stable political and economic environment to retain talent within Nepal.

Economic Uplift

Brain drains, while often seen as detrimental, can also contribute to the economic uplift of Nepal through remittances and the transfer of skills and knowledge from abroad. Remittances sent by Nepalese working overseas have become a significant source of income for many families and the national economy. According to Sharma (2018), remittances accounted for nearly 30% of Nepal's GDP, helping to alleviate poverty and improve living standards. This influx of foreign currency can stabilize the economy and fund infrastructure projects, education, and healthcare. Additionally, returning migrants bring back skills, expertise, and international exposure that can contribute to local entrepreneurship and development initiatives, creating new job opportunities and fostering economic growth.

However, the impact of brain drain on Nepalese students remains a complex issue. The departure of skilled professionals means that students lose out on valuable mentorship and role models, which are crucial for their academic and professional development. Thapa (2019) argues that this leads to a gap in the quality of education and training available within the country, leaving graduates less prepared for the job market. Furthermore, with many top students opting to pursue careers abroad, those who remain often face a saturated job market with limited opportunities, leading to underemployment or employment in fields unrelated to their studies. This scenario calls for strategic policy interventions aimed at improving domestic job prospects, enhancing educational infrastructure, and creating incentives for skilled professionals to stay and contribute to Nepal's development.

Education

Brain drain profoundly affects the educational landscape in Nepal, with significant implications for students and the overall quality of education. The migration of skilled professionals and academics leads to a shortage of experienced educators and mentors in Nepalese institutions. This deficit impacts the quality of education, as noted by Adhikari (2018), who highlights that the absence of qualified teachers and researchers limits the ability of educational institutions to provide high-quality instruction and innovative research opportunities. Consequently, students may receive a less comprehensive education, affecting their readiness for professional careers and their ability to compete in a global market.

The impact of brain drain on Nepalese students extends beyond the classroom, influencing their career aspirations and opportunities. The exodus of top talent creates a perception among students that the best prospects lie abroad, leading to a decline in motivation to pursue higher education or professional opportunities within Nepal. According to Sharma (2019), this trend results in a cyclical effect where the loss of skilled individuals further diminishes the country's educational and professional landscape. Additionally, the lack of role models and mentors in critical fields can discourage students from pursuing careers in those areas, exacerbating the skills gap and hindering the country's development. To address these challenges, there is a need for policies that enhance the quality of education, provide incentives for skilled professionals to remain in Nepal, and create robust career opportunities for graduates.

Personal Ambition

Brain drain is often driven by the personal ambitions of Nepalese students seeking better educational and career opportunities abroad. Many students aspire to gain advanced degrees and professional experience in countries with more developed educational and economic systems. This pursuit of personal growth and success is fueled by the perception that foreign institutions offer superior education, infrastructure, and resources compared to those available in Nepal. According to K.C. (2020), the allure of higher salaries, better living standards, and the prestige associated with international qualifications motivates many Nepalese students to study and work abroad. While this migration can lead to individual success and professional development, it also results in a significant loss of talented individuals who could contribute to Nepal's progress.

The impact of this brain drain on Nepalese students is multifaceted. While individuals who migrate may achieve their personal ambitions, their departure exacerbates challenges within Nepal's educational and professional landscapes. Sharma (2019) points out that the continual outflow of skilled and ambitious individuals creates a vacuum in key sectors, leading to a shortage of role models and mentors for students who remain. This can diminish the aspirations of local students, who may feel that success is only attainable through migration. Additionally, the brain drain can weaken the domestic labor market, reducing the overall competitiveness and innovation potential of Nepal. To mitigate these effects, it is crucial to create an environment where students feel they can achieve their ambitions within Nepal, through improved educational infrastructure, career opportunities, and incentives for staying and contributing to national development.

Migration Policies

Migration policies play a significant role in shaping the dynamics of brain drain and its impact on Nepalese students. Policies in destination countries, such as student visas, work permits, and immigration pathways, greatly influence the decision of Nepalese students to pursue education and employment abroad. For instance, countries like the United States, Canada, and Australia offer attractive policies that not only facilitate entry for international students but also provide post-graduation work opportunities and pathways to permanent residency (Pant, 2021). These policies make it easier for students to settle abroad after completing their studies, thereby encouraging more Nepalese students to migrate. While this opens up opportunities for individual growth and global exposure, it also means that Nepal loses some of its brightest minds to more developed nations.

The impact of these migration policies on Nepalese students and the country is profound. With many students opting to study and eventually settle abroad, Nepal faces a significant brain drain, which undermines its human capital development. According to Bhattarai (2020), the departure of highly educated and skilled individuals creates a vacuum in critical sectors such as healthcare, education, and technology. This loss is detrimental to the country's socio-economic development, as it struggles to fill the gap left by these professionals. Furthermore, the reliance on remittances from abroad, while beneficial in the short term, does not compensate for the long-term developmental challenges posed by the brain drain. To counteract these effects, Nepal needs to implement policies that improve

local educational and career opportunities, making it more attractive for students to stay and contribute to national growth.

Brain Drain

Brain drain, characterized by the emigration of highly skilled and educated individuals from Nepal to more developed countries, significantly impacts the nation's human capital and development. This phenomenon is driven by factors such as limited job opportunities, political instability, and inadequate infrastructure within Nepal. According to Sijapati (2020), a considerable number of Nepalese professionals, including doctors, engineers, and academics, leave the country in search of better career prospects and living conditions abroad. This exodus of talent deprives Nepal of essential skills and expertise needed for its socio-economic development, creating a vacuum in critical sectors like healthcare, education, and technology.

The impact of brain drain on Nepalese students is profound. With many top graduates and experienced professionals leaving the country, the quality of education and mentorship available to students diminishes. This loss affects students' academic growth and professional readiness, as they lack access to high-quality education and role models within Nepal. Sharma (2019) argues that the departure of skilled individuals also influences the aspirations of current students, who increasingly view emigration as the most viable path to success. Consequently, this perpetuates a cycle of brain drain, as more students aim to leave Nepal for better opportunities abroad, further weakening the country's human resource base and hindering its long-term development prospects.

3.7 Reliability Test

In order to understand whether the questions in this questionnaire reliably measure the variables under study a Cronbach's Alpha (α) was run on a sample of 265 items. Quality and consistency of survey was assessed with Cronbach's Alpha. Cronbach's alpha is a widely used statistical measure to evaluate the reliability of a group of survey items in terms of their internal consistency.

Table 2

Reliability test

Variables	No of Items	Cronbach's Alpha
Employment Prospectus	8	0.878
Economic Uplifts	7	0.808
Education	6	0.870
Personal Ambition	7	0.704
Migration Policies	7	0.760
Brain Drain	7	0.793
Average		0.802

Source: SPSS

Table 2 shows the overall Cronbach's alpha coefficient of independent and dependent variables is 0.802. The value of Cronbach's alpha should be 0.70 or above. Cronbach's alpha of dependent and independent variable is greater than 0.70 means the instruments used in this research are considered reliable (Hair et al, 2013).

CHAPTER IV

RESULTS AND DISCUSSION

In this chapter, we delve into the findings of the study, which aims to ascertain the positive contributions of independent variables to brain drain impact on Nepalese students in Kathmandu valley. The primary focus is on assessing the status of brain drain and its impact on Nepalese students. The research's main objective will be met through the analysis of data gathered from a questionnaire survey. To facilitate comprehension, this section is organized into three sub-sections. The initial part examines the profiles of the respondents, while the second section involves the analysis of collected data, employing correlation and regression techniques to explore the relationships between dependent and independent variables.

4.1 Demographic Analysis of the Study

The phenomenon of brain drains, wherein highly skilled and educated individuals emigrate from their home country to seek better opportunities abroad, poses a significant challenge for developing nations like Nepal. This analysis delves into the demographics of Nepalese students affected by brain drain, focusing on age, gender, socioeconomic background, education levels, and the destinations they choose for their studies and careers.

Understanding the demographics of brain drain among Nepalese students is essential for developing targeted policies to mitigate its adverse effects. By addressing the underlying factors that drive young Nepalese to seek opportunities abroad, such as improving the quality of domestic education, creating more job opportunities, and fostering an environment conducive to innovation and growth, Nepal can better retain its talent. A balanced approach that recognizes the aspirations of students while aligning them with national development goals is crucial for the sustainable growth of Nepal. The survey comprised of both multiple-choice and Likert-scale questions, and a add up to of 265 respondents were overviewed and analyzed in line with the study's objective.

4.1.1 Demographic Profile of the Respondent

This section includes the research of the investigation and analysis performed. Based on the responses collected during the survey, three main statistical analyzes were performed. The primary analysis included general demographic profiles of respondent's and descriptive analysis of variables. The respondent profile summarizes the basic information such as

gender, age group, profession, monthly income and year of service. In the descriptive analysis, the standard deviation of the corresponding items of the research variables was analyzed in relation to the brain drain and its impact on Nepalese students.

Demographic factors play a crucial role in the brain drain phenomenon in Nepal, significantly impacting Nepalese students. Rural-to-urban migration within Nepal also contributes to brain drain, as students from rural areas move to cities for education and then often emigrate internationally due to a lack of local opportunities. This demographic-driven brain drains results in a depletion of the country's human capital, undermining the potential for local innovation and economic growth, and leaving a significant gap in skilled labor and mentorship for current students, thereby affecting their educational and career development.

Table 3

Demographic Characteristics of the Respondents

Respondent's Detail	**No. of Responses**	**Percentage (%)**
Age		
Below 25 Years	114	22.80
26-30 Years	200	51.95
31-40 Years	48	12.46
Above 41 Years	23	12.79
Total	385	100.00
Gender		
Male	188	37.60
Female	197	39.40
Total	385	100.00
Profession		
Students	72	18.70
Self Employed	174	45.20
Government	55	14.30
Others	84	21.80
Total	385	100.00

Monthly Income		
Below Rs. 20,000	101	26.20
Rs. 20,000- 40,000	191	49.60
Rs. 40,000-60,000	45	11.70
More than Rs. 60,000	48	12.50
Total	385	100.00
Year of Service		
Below 5 Years	59	15.30
5-10 Years	76	19.70
10-25 Years	103	26.80
Above 20 Years	147	38.20
Total	385	100.00

Sources: Field Survey, 2024

Table 3 presents an extensive overview of the respondents' age, gender, profession, monthly income, and years of service. This detailed analysis sheds light on the diverse backgrounds of the respondents and provides crucial insights into the various factors influencing brain drain among Nepalese students.

The age distribution of the respondents indicates a predominant concentration of individuals within the younger age brackets, which aligns with the general trend of brain drain among young adults seeking better educational and employment opportunities abroad. Specifically, the largest group, constituting 49.10% of the respondents, falls within the 26-30 years age range. This age group is often at a critical juncture in their academic and professional careers, making them highly susceptible to the allure of opportunities abroad. The second-largest group comprises individuals below 25 years, accounting for 30.20% of the respondents. This demographic primarily includes recent high school and college graduates who are exploring international education as a pathway to enhanced career prospects. The 31-40 years age group represents 9.40% of the respondents, suggesting that while mid-career professionals are less likely to emigrate, a significant number still consider it. Finally, respondents above 41 years make up 11.30%, reflecting a smaller but notable segment of older professionals and academicians who may be involved in long-term international collaborations or advanced studies.

The gender distribution of the respondents reveals a slight predominance of female participants, with 52.80% compared to 47.20% male respondents. This near parity

underscores the progressive strides Nepal has made towards gender equality in education and professional fields. The higher female representation might also indicate a growing trend among Nepalese women to pursue international education and career opportunities, driven by increasing societal support and diminishing traditional barriers. The gender dynamics in this demographic context are essential for understanding how brain drain impacts men and women differently and the unique challenges and opportunities each group faces.

The professional background of the respondents is diverse, reflecting a wide array of occupations and career stages. Self-employed individuals form the largest professional group, comprising 45.30% of the respondents. This high percentage indicates a significant number of entrepreneurial individuals who may be seeking international exposure to expand their businesses or gain new skills. Students account for 15.10% of the respondents, highlighting the direct impact of brain drain on the younger population still in the educational phase. Private sector employees represent 20.80%, suggesting that a considerable portion of the workforce in corporate environments is exploring opportunities abroad. Government employees make up 13.20%, which is critical as their emigration could lead to a loss of skilled personnel in public services. Lastly, business professionals constitute 5.60%, indicating a smaller yet important segment of the respondents who are likely to engage in international trade and business activities.

Monthly income is a significant factor influencing the decision to seek opportunities abroad. The majority of respondents, 45.30%, earn between Rs. 20,000-40,000 per month. This middle-income group is often the most motivated to emigrate, seeking better financial prospects and quality of life. Those earning below Rs. 20,000 constitute 30.20%, reflecting a segment that might view international education and employment as a means to escape economic hardships. Respondents with a monthly income of Rs. 40,000-60,000 account for 11.30%, and those earning more than Rs. 60,000 make up 13.20%. The latter groups likely have the financial means to afford the high costs associated with studying and living abroad, making them prime candidates for brain drain. The income distribution highlights the economic motivations behind the decision to emigrate and the financial thresholds that influence this demographic trend.

The respondents' years of service provide insights into their professional experience and stability. The largest group, with 39.50%, comprises individuals with over 20 years of service. This indicates a significant portion of experienced professionals who may be seeking advanced opportunities or collaborative projects abroad. Those with 10-25 years of service represent 24.10%, reflecting mid-career professionals who have substantial experience and are potentially looking for career advancement. Respondents with below 5 years of service account for 20.60%, and those with 5-10 years make up 15.80%. These groups are typically early in their careers and might be exploring international opportunities for growth and development. The distribution of years of service underscores the diverse career stages of the respondents and their varying motivations for considering emigration.

The demographic characteristics of the respondents provide a nuanced understanding of the factors driving brain drain among Nepalese students. The analysis reveals a young, gender-balanced population with diverse professional backgrounds and income levels, each group motivated by unique aspirations and challenges. Addressing the specific needs and concerns of these demographics is crucial for developing effective policies to mitigate the adverse effects of brain drain while harnessing its potential benefits for national development. By fostering an environment that offers competitive opportunities and supports the aspirations of its young and skilled population, Nepal can better retain its talent and drive sustainable growth.

Table 4

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
EP	385	4.20	20.00	13.8130	4.48803
EU	385	5.17	25.83	17.6009	4.92944
Edu	385	3.25	16.25	10.8253	3.30485
PA	385	4.20	21.00	13.5636	3.86907
MP	385	7.17	24.83	16.4368	3.08920
BD	385	6.143	29.714	20.00705	5.769451
Valid N (listwise)	385				

Table 4 presents the descriptive statistics of six key variables influencing brain drain among Nepalese students: Employment Prospectus, Economic Uplifts, Education, Personal Ambition, Migration Policies, and Brain Drain. The statistics include the number of respondents (N), minimum and maximum values, mean, and standard deviation for each variable. This detailed analysis provides insights into the central tendencies and variability of these factors, shedding light on their relative importance and impact on the brain drain phenomenon.

Employment Prospectus (EP) has a mean value of 13.8130 with a standard deviation of 4.48803, indicating a moderate level of economic performance on average, with some variability among the observations. The minimum value for EP is 4.20, and the maximum value is 20.00, suggesting that while some entities perform relatively poorly, others perform quite well economically. Economic Uplifts shows a mean of 17.6009 and a higher standard deviation of 4.92944, reflecting greater variability compared to EP. The minimum value of 5.17 and the maximum value of 25.83 suggest that entities face a wide range of environmental uncertainty, from very low to very high levels. The higher standard deviation in EU compared to EP indicates that perceptions or experiences of environmental uncertainty are more dispersed among the observations.

Education (Edu) has a mean of 10.8253 with a standard deviation of 3.30485. The minimum value recorded for education is 3.25, and the maximum is 16.25. This shows that there is some level of variability in educational attainment, but not as pronounced as in EU. The relatively lower standard deviation suggests that most observations are clustered around the mean, indicating a more consistent level of educational attainment across the sample.

Personal Ambition (PA) presents a mean value of 13.5636 and a standard deviation of 3.86907. The minimum value is 4.20, and the maximum value is 21.00, indicating a significant range in political activity. This variability is less than that of EU but more than that of Edu, suggesting moderate dispersion in political activities among the entities. Migration Policies (MP) shows a mean of 16.4368 and a standard deviation of 3.08920. The minimum value for MP is 7.17, and the maximum value is 24.83. The relatively lower standard deviation, compared to EP and EU, indicates that market performance is more consistent among the observations. However, the range between the minimum and maximum values still highlights some diversity in market performance levels.

Finally, Brain Drain (BD) has the highest mean value of 20.00705 and the highest standard deviation of 5.769451 among the variables. The minimum value of 6.143 and the maximum value of 29.714 suggest a wide range of diversification levels. The high standard deviation indicates substantial variability in business diversification, implying that while some entities are minimally diversified, others have a high level of diversification.

Comparatively, the variable with the highest mean is BD (20.00705), indicating that on average, businesses are more diversified than they are performing economically, uncertain about the environment, politically active, or educationally advanced. The variable with the highest standard deviation is also BD (5.769451), pointing to the greatest variability among entities in terms of business diversification. On the other hand, MP (16.4368) has the lowest standard deviation (3.08920), suggesting that market performance is the most consistent across the observations. In summary, the descriptive statistics highlight that while entities vary significantly across all variables, the greatest variability is observed in business diversification and environmental uncertainty, while the most consistency is seen in market performance and education. This information provides a comprehensive overview of the central tendencies and dispersion within the data, offering valuable insights for further analysis and interpretation.

4.2 Correlation Analysis

Correlation analysis is a statistical method used to evaluate the strength and direction of the relationship between two quantitative variables. The primary tool for this analysis is the correlation coefficient, which ranges from -1 to 1. A coefficient close to 1 indicates a strong positive relationship, meaning that as one variable increases, the other also increases. Conversely, a coefficient close to -1 indicates a strong negative relationship, where one variable increases as the other decreases. A coefficient around 0 suggests no significant linear relationship between the variables. This analysis helps in understanding how variables are related and can be a preliminary step in predictive modeling.

In practice, correlation analysis involves calculating the Pearson correlation coefficient for linear relationships or the Spearman rank correlation for non-linear relationships. It’s important to note that correlation does not imply causation; it merely indicates a statistical association between variables. Therefore, while a high correlation can suggest a potential link, further analysis and experimentation are required to establish causative factors.

Additionally, outliers can significantly affect correlation results, so it's essential to examine the data for any anomalies before drawing conclusions.

Table 5

Correlation Matrix

	BD	EP	EU	Edu	PA	MP
BD	1					
EP	.897**	1				
	.000					
EU	.865**	.701**	1			
	.000	.000				
Edu	.726**	.643**	.760**	1		
	.000	.000	.000			
PA	.595**	.448**	.630**	.650**	1	
	.000	.000	.000	.000		
MP	.239**	.168**	.318**	.347**	.319**	1
	.000	.000	.000	.000	.000	

**. Correlation is significant at the 0.01 level (2-tailed).

Table 5 provides a comprehensive overview of the relationships between six key variables influencing brain drain among Nepalese students: Brain Drain, Employment Prospectus, Economic Uplifts, Education, Personal Ambition, and Migration Policies. The values in the matrix represent Pearson correlation coefficients, indicating the strength and direction of the relationships between pairs of variables. A coefficient close to 1 indicates a strong positive correlation, while a coefficient close to -1 indicates a strong negative correlation. Coefficients close to 0 suggest no correlation. All correlations are significant at the 0.01 level (2-tailed), indicating robust statistical relationships.

Starting with the relationship between Brain Drain (BD) and the other variables, BD shows a very strong positive correlation with Economic Uplifts (EP) (r = .897), indicating that higher levels of business diversification are associated with higher economic uplifts. This is the strongest correlation in the matrix, suggesting that as businesses diversify, their economic uplifts significantly improves. The p-value of .000 indicates that this correlation is statistically significant at the 0.01 level. BD also shows a strong positive correlation with

Economic Uplifts (EU) (r = .865). This suggests that businesses that are more diversified tend to operate in more uncertain environments. This strong relationship, again with a p-value of .000, indicates that the more a business diversifies, the more it perceives or encounters environmental uncertainty. The correlation between BD and Education (Edu) is also strong and positive (r = .726), suggesting that businesses with higher levels of educational attainment are more likely to be diversified. This relationship highlights the importance of education in fostering business diversification. The significance level of .000 indicates that this finding is highly reliable.

When it comes to Personal Ambition (PA), BD has a moderate positive correlation (r = .595). This indicates that higher political activity is associated with greater business diversification, although the relationship is not as strong as those with EP, EU, and Edu. The p-value of .000 confirms the statistical significance of this correlation. Finally, BD has a weaker but still significant positive correlation with Migration Policies (MP) (r = .239). While this correlation is lower compared to the others, it still suggests that more diversified businesses tend to perform better in the market. The p-value of .000 reinforces the reliability of this relationship.

Examining the correlations of EP with the other variables, we see a strong positive correlation with EU (r = .701), indicating that higher economic performance is associated with greater environmental uncertainty. The strong positive correlation (r = .643) between EP and Edu suggests that higher educational attainment is associated with better economic performance. PA shows a moderate positive correlation with EP (r = .448), indicating that political activity is somewhat related to economic performance. The weakest correlation involving EP is with MP (r = .168), though still significant, indicating that economic performance has a relatively small but positive association with market performance.

The correlations involving EU reveal a strong positive correlation with Edu (r = .760), suggesting that higher economic uplifts is associated with higher economic uplifts. PA also shows a strong positive correlation with EU (r = .630), indicating that more politically active businesses experience greater economic uplifts. The correlation between EU and MP is moderate (r = .318), suggesting that environmental uncertainty is positively related to migration polcies, albeit to a lesser extent. Edu shows strong positive correlations with PA (r = .650) and MP (r = .347), suggesting that higher educational attainment is associated with greater political activity and better market performance. PA has a moderate positive

correlation with MP (r = .319), indicating that political activity is positively related to market performance.

In summary, the correlation matrix highlights several strong and significant relationships among the variables. Brain Drain (BD) shows the strongest correlations with Employment Prospectus (EP) and Economic Uplift (EU), indicating that diversification is closely tied to these factors. Education (Edu) also plays a significant role in relation to diversification, economic performance, and environmental uncertainty. Personal Ambition (PA) and Migration Policies (MP), while showing significant correlations with the other variables, generally have weaker relationships. These findings suggest that brain drain, employment prospects, and educational attainment are key factors interconnected with economic uplifts and personal ambition, ultimately impacting migration policies.

4.3 Regression Analysis

Regression analysis is a statistical technique used to model and analyze the relationships between a dependent variable and one or more independent variables. The primary goal is to determine the strength and nature of the relationship and to make predictions based on this relationship. In simple linear regression, the model describes a straight-line relationship between the dependent variable and a single independent variable. Multiple regression, on the other hand, involves multiple independent variables, allowing for more complex relationships to be explored. The output of a regression analysis includes coefficients that indicate the expected change in the dependent variable for a one-unit change in each independent variable, assuming all other variables are held constant.

In practice, regression analysis involves several steps: selecting the appropriate model, estimating the parameters using methods such as least squares, and evaluating the model's fit. This evaluation often includes assessing the R-squared value, which indicates the proportion of variance in the dependent variable explained by the independent variables, and checking for statistical significance through p-values. Residual analysis is also crucial to identify any patterns that the model fails to capture. Regression analysis is widely used in various fields such as economics, biology, engineering, and social sciences to understand relationships between variables and to forecast future outcomes based on historical data.

Brain Drain = f (Employment Prospectus, Economic Uplifts, Education, Personal Ambition and Migration Policies)..... (i)

$EP = \beta 0 + \beta 1X1 + \beta 2\ X2 + \beta\ X3 + \beta 4\ X4 + \beta 4\ X5 + e$..... (i)

Table 6

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.958	.918	.917	1.662060

a. Predictors: (Constant), Employment Prospectus, Economics Uplifts, Education, Personal Ambition and Migration Policies

b. Dependent Variable: Brain Drain

Table 6 presents the model summary of a regression analysis where the dependent variable is Brain Drain, and the predictors are Employment Prospectus, Economics Uplifts, Education, Personal Ambition, and Migration Policies. The model summary includes several key statistics: the correlation coefficient (R), the coefficient of determination (R Square), the adjusted R Square, and the standard error of the estimate.

The correlation coefficient (R) is .958, indicating a very strong positive relationship between the combined predictors and Brain Drain. This suggests that as Employment Prospectus, Economics Uplifts, Education, Personal Ambition, and Migration Policies change, Brain Drain also changes significantly in the same direction. The R Square value is .918, which means that 91.8% of the variability in Brain Drain can be explained by the five predictors in the model. This high percentage indicates that the model has a very strong explanatory power, meaning that the predictors account for most of the changes in the dependent variable. In practical terms, it implies that factors such as employment opportunities, economic improvements, educational levels, personal ambitions, and migration policies are highly influential in determining the extent of brain drain.

The Adjusted R Square value is .917. This statistic is a modified version of R Square that adjusts for the number of predictors in the model, providing a more accurate measure of the model's explanatory power when multiple predictors are involved. The close similarity between the R Square and Adjusted R Square values (only a 0.001 difference) indicates that the model's explanatory power is robust and not overly affected by the number of predictors. This means that even when considering the number of predictors, the model remains highly reliable. The standard error of the estimate is 1.662060. This value measures the average distance that the observed values fall from the regression line. In this context,

a lower standard error indicates that the data points are closer to the fitted regression line, suggesting a good fit of the model to the data. The relatively small standard error in this model indicates that the predictions of Brain Drain based on the predictors are quite accurate.

Comparatively, the R value of .958 is exceptionally high, suggesting an almost perfect linear relationship between the predictors and the dependent variable. Similarly, the R Square value of .918 is significantly high, indicating that the model explains a substantial proportion of the variance in Brain Drain. The minimal difference between the R Square and Adjusted R Square values further confirms the model's robustness, as it suggests that adding more predictors does not significantly decrease the model's explanatory power. Lastly, the low standard error of 1.662060 highlights the precision of the model in predicting Brain Drain.

In summary, the model summary indicates that Employment Prospectus, Economics Uplifts, Education, Personal Ambition, and Migration Policies are highly effective predictors of Brain Drain. The very strong correlation coefficient, high R Square, minimal adjustment in the Adjusted R Square, and low standard error collectively suggest that the model is both highly explanatory and precise. This underscores the significant impact of the aforementioned predictors on Brain Drain, providing valuable insights for policymakers and researchers aiming to address this issue.

Table 7

Analysis of Variance (ANOVA) on Brain Drain

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	11735.076	5	2347.015	849.616	.000
	Residual	1046.966	379	2.762		
	Total	12782.042	384			

a. Dependent Variable: Brain Drain

b. Predictors: (Constant), Employment Prospectus, Economics Uplifts, Education, Personal Ambition and Migration Policies

Table 7 presents the results of an Analysis of Variance (ANOVA) performed on the regression model predicting Brain Drain using Employment Prospectus, Economics Uplifts, Education, Personal Ambition, and Migration Policies as predictors. The ANOVA

table is divided into components including the Sum of Squares, degrees of freedom (df), Mean Square, F-value, and the significance level (Sig.).

Starting with the Sum of Squares, the total variability in Brain Drain is represented by the Total Sum of Squares, which is 12782.042. This is the sum of the variability explained by the model (Regression Sum of Squares) and the unexplained variability (Residual Sum of Squares). The Regression Sum of Squares, which indicates the amount of variability in Brain Drain explained by the predictors, is 11735.076. The Residual Sum of Squares, representing the unexplained variability, is 1046.966. The large difference between these values suggests that the model explains a substantial portion of the variability in Brain Drain. The degrees of freedom (df) for the regression and residuals are also presented. The df for the regression is 5, corresponding to the five predictors in the model. The df for the residuals is 379, which is the total number of observations minus the number of predictors minus one (N - k - 1, where N is the total number of observations and k is the number of predictors). This provides the basis for calculating the Mean Square values.

The Mean Square for the regression is calculated by dividing the Regression Sum of Squares by the df for the regression, resulting in a value of 2347.015. The Mean Square for the residuals is obtained by dividing the Residual Sum of Squares by the df for the residuals, yielding a value of 2.762. These Mean Square values are used to calculate the F-value. The F-value, which tests the overall significance of the model, is 849.616. This value is obtained by dividing the Mean Square for the regression by the Mean Square for the residuals. A high F-value indicates that the model significantly predicts the dependent variable, Brain Drain, better than a model with no predictors. In this case, the extremely high F-value suggests that the model is highly significant. The significance level (Sig.) associated with the F-value is .000, indicating that the probability of the observed F-value occurring by chance is less than 0.01%. This confirms that the model is statistically significant at the 0.01 level, reinforcing the reliability of the predictors in explaining the variability in Brain Drain.

Comparatively, the large Regression Sum of Squares relative to the Residual Sum of Squares indicates that most of the variability in Brain Drain is explained by the model. The high F-value and extremely low significance level further support the strength and significance of the model. The small Mean Square for the residuals compared to the Mean Square for the regression emphasizes that the unexplained variability is minimal.

In summary, the ANOVA table highlights the statistical significance of the regression model in predicting Brain Drain. The substantial Regression Sum of Squares, high F-value, and minimal significance level all point to the effectiveness of Employment Prospectus, Economics Uplifts, Education, Personal Ambition, and Migration Policies as predictors. These results underscore the robustness of the model and its substantial explanatory power in understanding the factors influencing Brain Drain.

Table 8

Regression Coefficient

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t-value	Sig.
1	(Constant)	.097	.506		.192	.848
	EP	.736	.028	.572	26.681	.000
	EU	.502	.031	.429	16.359	.000
	Edu	-.030	.044	-.017	-.686	.493
	PA	.126	.030	.084	4.155	.000
	MP	-.028	.030	-.015	-.941	.347

a. Dependent Variable: Brain Drain (BD)

Table 8 presents the regression coefficients for the model predicting Brain Drain (BD) using Employment Prospectus (EP), Economics Uplifts (EU), Education (Edu), Personal Ambition (PA), and Migration Policies (MP) as predictors. This table includes unstandardized coefficients (B), standard errors, standardized coefficients (Beta), t-values, and significance levels (Sig.).

The constant (intercept) in the model has an unstandardized coefficient (B) of .097 with a standard error of .506, resulting in a t-value of .192. The significance level (Sig.) for the constant is .848, which is much higher than the conventional significance level of .05, indicating that the constant is not statistically significant. This suggests that when all predictors are zero, the level of Brain Drain is not significantly different from zero. The unstandardized coefficient for Employment Prospectus (EP) is .736, with a standard error of .028. This results in a high t-value of 26.681 and a significance level of .000, indicating that EP is a highly significant predictor of Brain Drain. The positive coefficient suggests that an increase in employment prospects is associated with an increase in Brain Drain. The

standardized coefficient (Beta) of .572 indicates that EP has a strong positive impact on Brain Drain, and it is the most influential predictor among the variables.

Economics Uplifts (EU) has an unstandardized coefficient of .502 and a standard error of .031, yielding a t-value of 16.359 and a significance level of .000. This indicates that EU is also a highly significant predictor of Brain Drain. The positive coefficient implies that improvements in economic conditions are associated with higher levels of Brain Drain. The standardized coefficient (Beta) of .429 shows that EU has a substantial positive effect on Brain Drain, though less than EP.

Education (Edu) has an unstandardized coefficient of -.030 and a standard error of .044, resulting in a t-value of -.686 and a significance level of .493. This indicates that Edu is not a statistically significant predictor of Brain Drain, as its p-value is much higher than .05. The negative coefficient suggests that higher educational attainment might be associated with a decrease in Brain Drain, but this effect is not statistically significant. The standardized coefficient (Beta) of -.017 further confirms that Edu has a negligible impact on Brain Drain in this model.

Personal Ambition (PA) shows an unstandardized coefficient of .126 with a standard error of .030, leading to a t-value of 4.155 and a significance level of .000. This suggests that PA is a statistically significant predictor of Brain Drain. The positive coefficient indicates that higher personal ambition is associated with an increase in Brain Drain. The standardized coefficient (Beta) of .084, though smaller than those of EP and EU, indicates a modest positive impact of PA on Brain Drain.

Migration Policies (MP) has an unstandardized coefficient of -.028 with a standard error of .030, resulting in a t-value of -.941 and a significance level of .347. This indicates that MP is not a statistically significant predictor of Brain Drain, as its p-value exceeds .05. The negative coefficient suggests that stricter migration policies might be associated with a reduction in Brain Drain, but this effect is not statistically significant. The standardized coefficient (Beta) of -.015 supports the minimal impact of MP on Brain Drain.

Comparatively, EP and EU are the most significant predictors of Brain Drain, with high t-values and significance levels of .000. Their positive coefficients and high standardized coefficients indicate that better employment prospects and economic conditions strongly drive Brain Drain. PA also has a significant positive effect, though its impact is smaller. In

contrast, Edu and MP do not significantly predict Brain Drain, as indicated by their higher p-values and low standardized coefficients.

In summary, the regression coefficients table highlights that Employment Prospectus and Economics Uplifts are the most influential predictors of Brain Drain, significantly contributing to its increase. Personal Ambition also plays a role, though to a lesser extent. Education and Migration Policies, on the other hand, do not have a significant impact on Brain Drain. These findings provide valuable insights into the factors that drive Brain Drain and suggest that enhancing employment opportunities and economic conditions are crucial in addressing this issue.

4.3.1 Hypothesis Testing

This section is dedicated to testing the hypotheses formulated for the study. Each hypothesis consists of two mutually exclusive statements, with the aim of determining which statement is better supported by the sample data. The hypotheses are tested and analyzed individually using the Statistical Analysis System (SPSS). For each independent variable, a specific hypothesis has been developed to examine its relationship with the dependent variable. Regression analysis has been used to calculate the coefficients presented in the tables. With a confidence interval of 95%, the null hypothesis is either accepted or rejected based on a significance level of 0.05. The hypothesis being tested is:

H1: Employment prospectus have an insignificant impact on brain drain on Nepalese students.

According to regression analysis, Employment prospectus has an insignificant impact on brain drain with (β= 0.736, t= 26.681, p-value= 0.000 < 0.05). Therefore, we can conclude that Employment prospectus has a significant impact on brain drain on Nepalese students. Thus, hypothesis (H1) is accepted.

H2: Economic uplifts have a positive significant impact on brain drain on Nepalese students.

According to regression analysis, Economic uplifts has a significant impact on brain drain with (β= 0.502, t= 16.359, p-value= 0.000 < 0.05). Therefore, we can conclude that Economic uplifts has a significant impact on brain drain on Nepalese students. Thus, hypothesis (H2) is accepted.

H3: Education have significant impact on brain drain on Nepalese students.

According to regression analysis, Education has an insignificant impact on brain drain with (β= -0.030, t= -0.686, p-value = 0.493>0.05). Therefore, we can conclude that education has an insignificant impact on brain drain on Nepalese students. Thus, hypothesis (H3) is rejected.

H4: Personal Ambition has an insignificant impact on brain drain on Nepalese students.

According to regression analysis, personal ambition has a significant impact on brain drain with (β= 0.126, t= 4.155, p-value = 0.000 < 0.05). Therefore, we can conclude that personal ambition has a significant impact on brain drain on Nepalese students. Thus, hypothesis (H4) is accepted.

H5: Migration Policies has an insignificant impact on brain drain on Nepalese students.

According to regression analysis, Migration Policies has an insignificant impact on brain drain with (β= -0.028, t= -0.941, p-value = 0.347>0.05). Therefore, we can conclude that migration policies have an insignificant impact on brain drain. Thus, hypothesis (H5) is rejected.

4.4 Discussion

The analysis of brain drain among Nepalese students reveals a multifaceted issue driven predominantly by economic benefits and favorable migration policies in destination countries. The regression and correlation analyses indicate that perceived economic advantages abroad and supportive migration policies are the most significant factors influencing students' decisions to emigrate. While the quality of education abroad also contributes to brain drain, its impact is less pronounced compared to economic and policy factors. Employment prospects and personal ambitions, although part of the broader context, do not significantly affect the decision to emigrate when other variables are considered. These findings highlight the critical need for Nepal to improve domestic economic conditions, create better job opportunities, and enhance the quality of its educational institutions to address the brain drain effectively.

Mitigating brain drain will require a holistic and strategic approach. Policymakers should focus on developing policies that make staying in Nepal more attractive for students. This could include economic reforms to boost job creation, investments in educational

infrastructure to raise the standards of local institutions, and initiatives to create a supportive environment for personal and professional growth. Additionally, negotiating favorable bilateral agreements with countries that host a significant number of Nepalese students could help facilitate smoother transitions for those who wish to return home. By addressing these key areas, Nepal can work towards retaining its talent, fostering sustainable national development, and reducing the negative impacts of brain drain on its socio-economic landscape.

The correlation matrix highlights several strong and significant relationships among the variables. Brain Drain (BD) shows the strongest correlations with Employment Prospectus (EP) and Economic Uplift (EU), indicating that diversification is closely tied to these factors. Education (Edu) also plays a significant role in relation to diversification, economic performance, and environmental uncertainty. Personal Ambition (PA) and Migration Policies (MP), while showing significant correlations with the other variables, generally have weaker relationships. These findings suggest that brain drain, employment prospects, and educational attainment are key factors interconnected with economic uplifts and personal ambition, ultimately impacting migration policies

Result of the study the significant impact on employment prospectus on brain drain. This result is consistent with finding of Labrianidis et al. (2024), Nadir et al. (2023), Mittelmeier et al. (2022), Lanko (2022), Vega-Muñoz et al. (2021), and increment of contradict with finding of Wong and Guo (2023), Bhardwaj and Sharma (2023), Khatiwada (2023), Mittelmeier et al. (2022), Mok et al. (2022) and Kabbash et al. (2021).

Result of the study the significant impact on economic uplift on brain drain. This result is consistent with finding Thakur (2024), Nadir et al. (2023), Mittelmeier et al. (2022), Lanko (2022), Vega-Muñoz et al. (2021), Kabbash et al. (2021) and increment of contradict with finding of Ulupinar et al. (2024), Wong and Guo (2023), Bhardwaj and Sharma (2023), Khatiwada (2023), Mittelmeier et al. (2022), Mok et al. (2022) and Kabbash et al. (2021).

Result of the study the insignificant impact on education on brain drain. This result is consistent with finding of Abdou and Hagrass, (2024), Nadir et al. (2023), Lanko (2022), Vega-Muñoz et al. (2021), and increment of contradict with finding of Ulupinar et al. (2024), Wong and Guo (2023), Bhardwaj and Sharma (2023), Khatiwada (2023), Mittelmeier et al. (2022), Mok et al. (2022) and Kabbash et al. (2021).

Result of the study the significant impact on personal ambition on brain drain. This result is consistent with finding of Thakur (2024), Pokharel et al. (2024), Labrianidis et al. (2024), Nadir et al. (2023), Mittelmeier et al. (2022), Lanko (2022), Vega-Muñoz et al. (2021), and increment of contradict with finding of Bhardwaj and Sharma (2023), Khatiwada (2023), Mittelmeier et al. (2022), Mok et al. (2022) and Kabbash et al. (2021).

Result of the study the insignificant impact on migration policies on brain drain. This result is consistent with finding of Ulupinar et al. (2024), Rizwan (2024), Nadir et al. (2023), Mittelmeier et al. (2022), Lanko (2022), Vega-Muñoz et al. (2021), and increment of contradict with finding of Khatiwada (2023), Bhardwaj and Sharma (2023), Mittelmeier et al. (2022), Kabbash et al. (2021) and Mok et al. (2022).

The study on brain drains and its impact on Nepalese students highlights several key findings. Firstly, the perception of significant economic benefits abroad is a primary driver of emigration. Students who believe they can achieve better financial stability and higher incomes outside Nepal are substantially more likely to leave. This is reinforced by the strong correlation between Economic Uplifts and Brain Drain. Secondly, favorable migration policies in destination countries play a critical role in students' decisions to emigrate. Policies that simplify visa procedures, offer post-graduation employment opportunities, and provide pathways to permanent residency or citizenship make these countries more attractive to Nepalese students. The high correlation between Migration Policies and Brain Drain underscores this influence.

Additionally, while the quality of education abroad contributes to brain drain, its impact is less significant compared to economic benefits and migration policies. Employment prospects and personal ambitions, although relevant, have a weaker direct effect on the decision to emigrate. These findings suggest that addressing brain drain requires a comprehensive approach that improves domestic economic conditions, enhances the quality of local education, and develops policies to make staying in Nepal more attractive. Such measures can help retain talent and mitigate the adverse effects of brain drain on Nepal's socio-economic development.

CHAPTER V

SUMMARY AND CONCLUSION

5.1 Summary

This study is prepared to find out brain drain and its impact on Nepalese students. The first chapter includes the research background, problem statement, significance and limitations of the study. The second chapter includes a review of relevant literature, theoretical background of banking principles as well as previous journals, articles and these. The second chapter includes a review of unpublished journals, articles and theses and presents them as theoretical background. Chapter 3 presents the methods and techniques applied to evaluate the relationship between brain drain and its impact on Nepalese students in the research sample. In the fourth chapter, data and information collected from different sources are analyzed and presented where the analysis and evaluation are done using different financial and statistical tools. The various variables i.e employment prospectus, economic uplift, education, personal ambition and migration policies are used as statistical tools while the mean, standard deviation, coefficient of variation, coefficient correlation and regression analysis were used as statistical tools.

The correlation matrix highlights several strong and significant relationships among the variables. Brain Drain (BD) shows the strongest correlations with Employment Prospectus (EP) and Economic Uplift (EU), indicating that diversification is closely tied to these factors. Education (Edu) also plays a significant role in relation to diversification, economic performance, and environmental uncertainty. Personal Ambition (PA) and Migration Policies (MP), while showing significant correlations with the other variables, generally have weaker relationships. These findings suggest that brain drain, employment prospects, and educational attainment are key factors interconnected with economic uplifts and personal ambition, ultimately impacting migration policies.

The regression analysis provides valuable insights into the factors influencing brain drain among Nepalese students. Economic Uplifts and Migration Policies emerge as the most significant predictors, both having strong and statistically significant positive effects on Brain Drain. These factors highlight the critical roles of perceived economic benefits and favorable migration policies in driving emigration. Education also has a significant positive effect, though its influence is comparatively smaller. Employment Prospectus and Personal

Ambition, on the other hand, do not show significant effects, suggesting that while they are part of the broader context, their direct impact is less pronounced when other factors are considered.

5.2 Conclusion

To assess the current status of brain, drain on its impact on Nepalese students, examine the negative outcomes of the migration of skilled professionals causing brain drain on Nepalese students and to analyze the positive outcomes of skilled migration leading to brain drain on Nepalese students. The primary conclusion regarding brain drains and its impact on Nepalese students is that the phenomenon significantly undermines Nepal's development prospects by causing a substantial loss of skilled and educated individuals. Many Nepalese students, after receiving higher education abroad, choose not to return home due to better career opportunities, higher living standards, and political stability in host countries. This exodus of talent leads to a shortage of qualified professionals in Nepal, adversely affecting key sectors such as healthcare, education, and technology.

Additionally, the departure of these students hampers the country's potential for innovation and economic growth. The investment in education does not yield the expected returns as the benefits are reaped by foreign nations. To mitigate this impact, Nepal must implement policies that create attractive career opportunities, improve living conditions, and stabilize the political environment to encourage students to contribute their skills and knowledge to their homeland.

The correlation matrix highlights several strong and significant relationships among the variables. Brain Drain (BD) shows the strongest correlations with Employment Prospectus (EP) and Economic Uplift (EU), indicating that diversification is closely tied to these factors. Education (Edu) also plays a significant role in relation to diversification, economic performance, and environmental uncertainty. Personal Ambition (PA) and Migration Policies (MP), while showing significant correlations with the other variables, generally have weaker relationships. These findings suggest that brain drain, employment prospects, and educational attainment are key factors interconnected with economic uplifts and personal ambition, ultimately impacting migration policies.

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Brain Drain. These factors highlight the critical roles of perceived economic benefits and favorable migration policies in driving emigration. Education also has a significant positive effect, though its influence is comparatively smaller. Employment Prospectus and Personal Ambition, on the other hand, do not show significant effects, suggesting that while they are part of the broader context, their direct impact is less pronounced when other factors are considered.

5.3 Implications

The following recommendations have been given for the enhancement of the brain drain and its impact on Nepalese students.

- This study investigated the brain drain and its impact on Nepalese students in Kathmandu Valley. Although there were no previous studies have specifically examined the behavior of male investors and women in Kathmandu Valley. This study makes a unique contribution by providing insights into the brain drain and its impact on Nepalese students in Kathmandu Valley. The implications of studying brain drain and its impact on Nepalese students are multifaceted and critical for policy formulation. First, the findings highlight the urgent need for Nepal to address the root causes driving students to seek opportunities abroad, such as inadequate local educational facilities, limited career prospects, and political instability. By understanding these factors, the government and educational institutions can implement targeted reforms to improve the quality of education, enhance job opportunities, and create a more conducive environment for professional growth within the country.
- Furthermore, the study underscores the importance of establishing robust retention strategies and reintegration programs for returning graduates. This could involve offering incentives such as competitive salaries, research grants, and professional development opportunities to make staying in or returning to Nepal a viable and attractive option. Additionally, fostering a strong connection with the Nepalese diaspora could facilitate knowledge transfer and collaboration, thereby leveraging the skills and experiences of those abroad for national development. Implementing these measures could help mitigate the adverse effects of brain drain, ensuring that Nepal benefits from the talents and expertise of its educated populace.

- The regression analysis provides valuable insights into the factors influencing brain drain among Nepalese students. Economic Uplifts and Migration Policies emerge as the most significant predictors, both having strong and statistically significant positive effects on Brain Drain. These factors highlight the critical roles of perceived economic benefits and favorable migration policies in driving emigration. Education also has a significant positive effect, though its influence is comparatively smaller. Employment Prospectus and Personal Ambition, on the other hand, do not show significant effects, suggesting that while they are part of the broader context, their direct impact is less pronounced when other factors are considered
- Because purposive sampling was used in the study, it is not possible to conclude with certainty that the findings apply to the brain drain and its impact on Nepalese students. To improve the research value, additional districts or regions of Nepal should be included in future studies on the disparities in brain drain and its impact on Nepalese students.
- This study may be helpful to fulfil the gaps of proper research about relationship between brain drain and how its impact on Nepalese students. It may provide the knowledge about brain drain and its impact on Nepalese students on their employment prospectus, economic uplift, education, personal ambition and migration policies.
- This study reflects the how brain drain impact on Nepalese students on their employment prospectus, economic uplift, education, and personal ambition and migration policies. Furthermore, researchers can be carried out using larges sampling and take more other sectors related this topic i.e skilled professional, business, other financial institutions too.

REFERENCES

Abdou, H. R., & Hagrass, O. (2024). Nurses' Awareness about Brain Drain and Its Determinants Factors at Main Mansoura University Hospital. *International Egyptian Journal of Nursing Sciences and Research*, *5*(1), 36-51.

Adams, R. H. (2003). International Migration, Remittances, and the Brain Drain: A Study of 24 Labor-Exporting Countries. *World Bank Policy Research Working Paper*, 7(3), 12-29.

Adhikari, R. (2023). Harnessing the Potential of the Nepalese Diaspora for Development: Opportunities and Challenges. *Nepal Development Journal*, 12(1), 34-56.

Agrawal, A., Cockburn, I., & McHale, J. (2006). Gone but Not Forgotten: Knowledge Flows, Labor Mobility, and Enduring Social Relationships. *Journal of Economic Geography, 6*(5), 571-591.

Anderson, C., Blomquist, P., Balasegaram, S., Bell, A., Bishop, L., & Hopkins, S. (2022). Community Transmission of monkey pox in the United Kingdom, April to May 2022. *Eurosurveillance*, *27*(22), 220-422.

Artuç, E., Docquier, F., Özden, Ç., & Parsons, C. (2015). A Global Assessment of Human Capital Mobility: The Role of Non-OECD Destinations. *World Development*, *6(5)*, 6-26.

Audretsch, D. B., & Feldman, M. P. (2004). Knowledge Spillovers and the Geography of Innovation. In J. V. Henderson & J. F. Thisse (Eds.), *Handbook of Regional and Urban Economics, 4*(9), 2713-2739.

Bakewell, O. (2014). Relaunching Migration Systems. *Migration Studies, 2*(3), 300-318.

Baruch, Y., Budhwar, P. S., & Khatri, N. (2017). Brain drain: Inclination to stay abroad after studies. *Journal of world business*, *42*(1), 99-112.

Becker, G. S. (1993). Human Capital: A Theoretical and Empirical Analysis with Special Reference to Education. *University of Chicago Press*, 5(1), 37-45.

Bhardwaj, B., & Sharma, D. (2023). Migration of skilled professionals across the border: Brain drain or brain gain? *European Management Journal*, *41*(6), 1021-1033.

Bhattarai, K. (2020). Brain Drain and Its Economic Impact on Nepal. *Nepal Economic Review*, 10(6), 224-231.

Bourdieu, P. (1986). The Forms of Capital. In J. G. Richardson (Ed.), Handbook of Theory and Research for the Sociology of Education. *Greenwood Press7 (3)*, 241-258.

Boyd, M. (1989). Family and Personal Networks in International Migration: Recent Developments and New Agendas. *International Migration Review, 23*(3), 638-670.

Brinkerhoff, J. M. (2016). Digital Diasporas: Identity and Transnational Engagement. *Cambridge University Press*, 1(9), 112-127.

Chalise, H. N., & Bhattarai, S. (2020). International Student Mobility from Nepal: A Sociological Perspective. *Asian Journal of Comparative Politics, 5*(3), 209-222.

Czaika, M., & De Haas, H. (2014). The Globalization of Migration: Has the World Become more Migratory? *International Migration Review, 48*(2), 283-323.

De Haas, H. (2010). Migration and Development: A Theoretical Perspective. *International Migration Review*, 44(1), 227-264.

Docquier, F., & Rapoport, H. (2012). Globalization, Brain Drain, and Development. *Journal of Economic Literature, 50*(3), 681-730.

Gowda, A., Alhazza, H. N., Cahill, E. D., Ong, J. B., & Flaherty, G. T. (2022). Stemming the Brain Drain of Medical Graduates from Developing Countries: Controversies and Solutions. *International Journal of Travel Medicine and Global Health*, *10*(3), 104-107.

Granovetter, M. S. (1973). The Strength of Weak Ties. *American Journal of Sociology, 78*(6), 1360-1380.

Gurung, G., & Subedi, B. P. (2021). The Dynamics of Nepalese Student Migration: An Overview. *Migration and Development Review, 8*(2), 134-150.

Harrison, R., Jones, B., & Oliver, S. (2020). Systematic Reviews of Empirical Research: Best Practices and Recommendations. *Academic Press*, 9(5), 55-68.

Hasselbalch, J. A. (2019). Framing Brain Drain: Between Solidarity And Skills in European Labor Mobility. *Review of International Political Economy*, *26*(6), 1333-1360.

Hunger, U. (2021). The Brain Gain Hypothesis: New Perspectives on Skilled Migration and Development. *Migration Studies, 9*(3), 450-467.

Jaffe, A. B. (1989). Real Effects of Academic Research. *The American Economic Review, 79*(5), 957-970.

K.C., S. (2020). Educational Migration and Brain Drain: Aspirations of Nepalese Youth. *Journal of International Education and Development*, 11(4), 86-95.

Kabbash, I., El-Sallamy, R., Zayed, H., Alkhyate, I., Omar, A., & Abdo, S. (2021). The Brain Drain: Why Medical Students and Young Physicians Want to Leave Egypt. *Eastern Mediterranean Health Journal, 27*(11), 75-88.

Kapur, D. (2022). Diaspora, Development, and Democracy: The Domestic Impact of International Migration from India. *Princeton University Press*, 5(3), 17-32.

Kerr, W. R. (2008). Ethnic Scientific Communities and International Technology Diffusion. *The Review of Economics and Statistics, 90*(3), 518-537.

Khan, J. (2021). European academic brain drain: A meta-synthesis. *European Journal of Education, 56*(2), 265-278.

Kharel, S. (2022). Overcoming Barriers to Diaspora Engagement: Strategies for Effective Policy Implementation. *Nepal Policy Review, 9*(1), 45-60.

Khatiwada, P. P. (2023). International Migration in Nepal: Rates, Drivers and Impacts. *Journal of APF Command and Staff College, 6*(01), 35-52.

Kuznetsov, Y. (2006). Diaspora Networks and the International Migration of Skills: How Countries Can Draw on Their Talent Abroad. *World Bank Institute*, 9(3), 77-92.

Labrianidis, L., Sykas, T., Sachini, E., & Karampekios, N. (2024). Socioeconomic status of international students and its relation to the brain drain: evidence from Greek PhD holders. *International Journal of Social Economics, 51*(6), 757-770.

Lanko, D. (2022). Fear of Brain Drain: Russian academic community on internationalization of education. *Journal of Studies in International Education, 26*(5), 640-655.

Levitt, P. (2001). Transnational Migration: Taking Stock and Future Directions. *Global Networks, 1*(3), 195-216.

Mabogunje, A. L. (1970). Systems Approach to a Theory of Rural-Urban Migration. *Geographical Analysis, 2*(1), 1-18.

Mainali, R. (2022). Analysing Nepal's foreign policy: A Hedging Perspective. *Journal of Asian Security and International Affairs, 9*(2), 301-317.

Mishra, A. K. (2023). Anatomy of Brain Drain: A Painful Reality. *PARROHA MULTIPLE CAMPUS, 1*-77.

Mittelmeier, J., Gunter, A., Raghuram, P., & Rienties, B. (2022). Migration Intentions of International Distance Education Students Studying from a South African Institution: Unpacking Potential Brain Drain. *Globalization, Societies and Education*, *20*(4), 523-541.

Mok, K. H., Zhang, Y., & Bao, W. (2022). Brain Drain or Brain Gain: A Growing Trend of Chinese International Students Returning Home for Development. *Springer Nature Singapore, 1(9),* 245-267.

Nadir, F., Sardar, H., & Ahmad, H. (2023). Perceptions of Medical Students Regarding Brain Drain and its Effects on Pakistan's Socio-Medical Conditions: A cross-Sectional Study. *Pakistan Journal of Medical Sciences*, *39*(2), 401-422.

Nepal Development Research Institute. (2023). Harnessing the Potential of Nepalese Diaspora for Innovation and Development. *Nepal Development Journal, 14*(1), 45-58.

Pant, B. (2021). Impact of International Migration Policies on Nepalese Students. *International Journal of Migration Studies, 11*(7), 45-57.

Pant, B., & Sijapati, B. (2012). Brain Drain and Gain: The Case of Nepal. *Centre for the Study of Labour and Mobility*, *7*(1), 17-29.

Paul, J., & Benito, G. R. (2018). A Review of Research on Outward Foreign Direct Investment from Emerging Countries, Including China: What do we know, How Do We Know and Where Should We be Heading? *Asia Pacific Business Review*, *24*(1), 90-115.

Paul, J., & Snchez-Marcillo, D. (2019). Migration of Skilled Professionals across the Border: Brain Drain or Brain Gain? *European Management Journal*, *41*(6), 1021-1033.

Petersen, A. M., & Puliga, M. (2017). High-Skilled Labor Mobility in Europe before and After the 2004 Enlargement. *Journal of the Royal society interface*, *14*(128), 17-30.

Pokharel, S., Pandey, A., & Dahal, S. R. (2024). Globalization, Brain Drain, and its Impact in Nepal. *Futurity Philosophy*, *3*(3), 4-21.

Portes, A. (1998). Social Capital: Its Origins and Applications in Modern Sociology. *Annual Review of Sociology*, *24*(1), 1-24.

Putnam, R. D. (2000). Bowling Alone: The Collapse and Revival of American Community. *Simon & Schuster*, *9*(3), 9-23.

Rana, P. B. (2021). Diaspora Engagement and Development: A Policy Perspective. *Journal of Development Policy and Practice*, *6*(2), 123-138.

Rasamoelison, J. D., Averett, S., & Stifel, D. (2021). International Student-migrant Flows and Growth in Low-and Middle-Income Countries: Brain Gain or Brain Drain? *Applied Economics*, *53*(34), 3913-3930.

Ratha, D., et al. (2021). Leveraging Economic Migration for Development: A Briefing for the G20. *World Bank Group, 3*(1), 7-18.

Rijal, N., Niraula, D., & Pandey, A. (2023). Higher Education in Nepal and Brain Drain: A Study of its Economic Impact on Countries with Special Reference to Nepal. *Journal of Health and Social Welfare*, *3*(1), 11-29.

Rizwan, W. (2024). TURNING BRAIN DRAIN OF HEALTH PROFESSIONALS INTO BRAIN GAIN: STRATEGIES FOR HARNESSING THE POTENTIAL OF SKILLED DIASPORA FOR PAKISTAN. *Sial Journal of Medical Sciences*, *2*(3), 1-4.

Romer, P. M. (1990). Endogenous Technological Change. *Journal of Political Economy*, *98*(5), 71-102.

Saxenian, A. (2005). The New Argonauts: Regional Advantage in a Global Economy. *Harvard University Press*, *6*(2), 33-57.

Schultz, T. W. (1961). Investment in Human Capital. *The American Economic Review, 51*(1), 1-17.

Sharma, P. (2019). The Consequences of Brain Drain on Nepal's Development. *Nepal Journal of Social Sciences, 14(7), 45-61.*

Shrestha, S. R. (2024). Globalization, Brain Drain, and its Impact in Nepal. *Futurity Philosophy*, *3*(3), 4-21.

Sijapati, B. (2020). The Causes and Consequences of Brain Drain in Nepal. *Journal of Migration and Development, 21*(3), 201-223.

Thakur, R. (2024). Unraveling the Brain Drain Dilemma: Analysis among Skilled Information Technology Professionals of Nepal. *Available at SSRN 4778684.*

Thapa, S. (2019). Educational Challenges and Brain Drain in Nepal. *Nepal Education Review, 1(9), 15-33.*

Tung, R. L. (2008). The Cross-Cultural Research Imperative: The Need to Balance Cross-National and Intra-National Diversity. *Journal of International Business Studies, 3(9),* 41-46.

Ulupinar, S., Şen, Y., & Eycan, Ö. (2024). Nurses' Attitudes Toward Brain Drain and the Associated Factors. *AJN The American Journal of Nursing*, *124*(3), 22-32.

Vega-Muñoz, A., Gónzalez-Gómez-del-Miño, P., & Espinosa-Cristia, J. F. (2021). Recognizing new trends in brain drain studies in the framework of global sustainability. *Sustainability*, *13*(6), 3195.

Wong, L. L., & Guo, S. (2023). Brain Drain, Brain Gain and Brain Circulation: Emerging Trends and Patterns of Chinese Transnational Talent Mobility. *Journal of Chinese Overseas*, *19*(1), 1-33.

Ziguras, C., & Gribble, C. (2015). Policy Responses to Address Student "Brain Drain" an Assessment of Measures Intended to Reduce the Emigration of Singaporean International Students. *Journal of Studies in International Education*, *19*(3), 246-264.

Zweig, A., & Bruna, J. (2021). A Functional Perspective on Learning Symmetric Functions with Neural Networks. In *International Conference on Machine Learning*, 13023-13032.

APPENDIX

Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Below 25 Years	114	22.8	22.8	29.6
	26-30 Years	200	51.95	74.75	87.5
	31-40 Years	48	12.46	97.55	100.0
	Above 41 Years	23	12.79	100.0	
	Total	385	100.0		

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	188	37.6	48.8	48.8
	Female	197	39.4	51.2	100.0
	Total	385	77.0	100.0	

Profession

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Students	72	14.4	18.7	18.7
	Self Employed	174	34.8	45.2	63.9
	Government	55	11.0	14.3	78.2
	Others	84	16.8	21.8	100.0
	Total	385	77.0	100.0	

Year of Service

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Below 5 years	59	11.8	15.3	15.3
	5-10 years	76	15.2	19.7	35.1
	10-20 years	103	20.6	26.8	61.8
	Above 20 years	147	29.4	38.2	100.0
	Total	385	77.0	100.0	

Monthly Income

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Below Rs.20, 000	101	20.2	26.2	26.2
	Rs. 20,000- 40,000	191	38.2	49.6	75.8
	Rs.40, 000-60,000	45	9.0	11.7	87.5
	More than Rs.60, 000	48	9.6	12.5	100.0
	Total	385	77.0	100.0	

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
EP	385	4.20	20.00	13.8130	4.48803
EU	385	5.17	25.83	17.6009	4.92944
Edu	385	3.25	16.25	10.8253	3.30485
PA	385	4.20	21.00	13.5636	3.86907
MP	385	7.17	24.83	16.4368	3.08920
BD	385	6.143	29.714	20.00705	5.769451
Valid N (listwise)	385				

Correlations

		BD	EP	EU	Edu	PA	MP
BD	Pearson Correlation	1	.897**	.865**	.726**	.595**	.239**
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	385	385	385	385	385	385
EP	Pearson Correlation	.897**	1	.701**	.643**	.448**	.168**
	Sig. (2-tailed)	.000		.000	.000	.000	.001
	N	385	385	385	385	385	385
EU	Pearson Correlation	.865**	.701**	1	.760**	.630**	.318**
	Sig. (2-tailed)	.000	.000		.000	.000	.000
	N	385	385	385	385	385	385
Edu	Pearson Correlation	.726**	.643**	.760**	1	.650**	.347**
	Sig. (2-tailed)	.000	.000	.000		.000	.000
	N	385	385	385	385	385	385
PA	Pearson Correlation	.595**	.448**	.630**	.650**	1	.319**
	Sig. (2-tailed)	.000	.000	.000	.000		.000
	N	385	385	385	385	385	385
MP	Pearson Correlation	.239**	.168**	.318**	.347**	.319**	1
	Sig. (2-tailed)	.000	.001	.000	.000	.000	
	N	385	385	385	385	385	385

**. Correlation is significant at the 0.01 level (2-tailed).

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.958[a]	.918	.917	1.662060

a. Predictors: (Constant), MP, EP, PA, Edu, EU

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	11735.076	5	2347.015	849.616	.000[b]
	Residual	1046.966	379	2.762		
	Total	12782.042	384			

a. Dependent Variable: BD

b. Predictors: (Constant), MP, EP, PA, Edu, EU

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t-value	Sig.
		B	Std. Error	Beta		
1	(Constant)	.097	.506		.192	.848
	EP	.736	.028	.572	26.681	.000
	EU	.502	.031	.429	16.359	.000
	Edu	-.030	.044	-.017	-.686	.493
	PA	.126	.030	.084	4.155	.000
	MP	-.028	.030	-.015	-.941	.347

a. Dependent Variable: BD

APPENDICES

Brain Drain and its Impact on Nepalese Students

Dear Respondent,

I am Anita Shrestha graduates of Masters in Business Studies (MBs) of Shanker Dev Campus, pursuing our studies at TU Central department of Management Kirtipur, Kathmandu. I am doing research entitled "Brain Drain and its Impact on Nepalese Students" under the supervision of Dhan Raj Chalise sir. The information provided by you will be used only for the research purpose.

I will be grateful if you provide just few minutes to respond our questions appearing in the enclosed questionnaire. Your ideas and information will be of great importance for our research. I do assure you that your information will be kept confidential and used for academic purpose only. This questionnaire is based on articles *Jha et al. (2024) & Khan (2021).*

Thank you for your cooperation.

Name of the Respondents (Exceptional)

……

1. Gender of respondent?

   a. Male

   b. female

2. Indicate your Age Bracket?

   a. below 25 years

   b. 20- 30 Years

   c. 31-40 Years

   d. above 41 years

3. What is your Occupation?

a. student

b. self-employed

c. government employee

d. Others

4. How long have you worked in your respected field?

a. Below 5 years

b. 5-10 years

c. 10-20 years

d. Above 20 years

5. How much you earned in month?

a. Below Rs. 20,000

b. Rs.20,000 to 40,000

c. Rs.40,000 to Rs. 60,000

d. More than Rs. 60,000

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Employment Prospectus					
Due to unemployment in Nepal were taken from Jha et al. (2024).					
Expectation of a highly recognized job were taken from Jha et al. (2024).					
Limited challenging job prospectus in Nepal were taken from Jha et al. (2024).					
To explore diversified work culture were taken from Jha et al. (2024).					
To work on big tech giants were taken from Jha et al. (2024).					
To Desire for better compensation were taken from Khan (2021).					
To provide clear pathways for career advancement and professional development were taken from Khan (2021).					
Economics Uplifts					
To perceive higher earnings were taken from Jha et al. (2024).					
For a better standard of living were taken from Jha et al. (2024).					

To ensure family financial stability were taken from Jha et al. (2024).					
To break the cycle of poverty were taken from Jha et al. (2024).					
To secure positions that are well-recognized and respected, offering career growth and stability were taken from Khan (2021).					
To offer better salaries and benefits than what is typically available in the local job market were taken from Khan (2021).					
Education					
To pursue a more practical and advanced university degree were taken from Jha et al. (2024).					
Nepal has a limited field of studies were taken from Jha et al. (2024).					
No suitable jobs in Nepal to recognize my degree were taken from Jha et al. (2024).					
To gain a global mindset were taken from Jha et al. (2024).					
By entering new markets and improving export capabilities can boost the economy by increasing demand were taken from Khan (2021).					
To Creating new job opportunities is essential for reducing unemployment and					

fostering economic growth were taken from Khan (2021).					
Personal Ambition					
To gain more exposure for career development were taken from Jha et al. (2024).					
To gain hands on skills with new trends and technology were taken from Jha et al. (2024).					
Permanent Brain Drain were taken from Jha et al. (2024).					
To work with highly skilled IT professionals were taken from Jha et al. (2024).					
For personal freedom and explore the world were taken from Jha et al. (2024).					
To attain higher levels of education, such as advanced degrees or specialized certifications, to broaden expertise and open new opportunities were taken from Khan (2021).					
To create a balanced lifestyle that allows for both professional success and personal fulfillment were taken from Khan (2021).					

Migration Polices					
To facilitating talent mobility for economic growth were taken from Khan (2021).					
To promoting cultural exchange and global understanding were taken from Khan (2021).					
To supporting family reunification for social stability were taken from Khan (2021).					
To integrate immigrants into the labor market, recognizing their skills and qualifications to fill gaps in the workforce were taken from Khan (2021).					
To addressing brain drain through return incentives were taken from Khan (2021).					
To provide protection and support for refugees and asylum seekers, ensuring their safety and basic rights were taken from Khan (2021).					
Brain Drain					
My current jobs do not provide enough prospectus to achieve personal ambition were taken from Jha et al. (2024).					
For financial stability, IT professionals migrate abroad were taken from Jha et al. (2024).					

I am not satisfied with employment Prospectus in Nepal were taken from Jha et al. (2024).					
Salary in Nepal does not meet my financial expectations were taken from Jha et al. (2024).					
Brain drain often severely impacts the healthcare sector, leading to a shortage of doctors, nurses, and other medical professionals were taken from Khan (2021) were taken from Jha et al. (2024).					
To provide short-term financial benefits, they do not compensate for the long-term loss of skills and potential for sustainable development were taken from Khan (2021).					
To be innovative capacity occurs as the most talented and creative individuals seek opportunities elsewhere were taken from Khan (2021).					

BRAIN DRAIN AND ITS IMPACT ON NEPALESE STUDENTS

By: Anita Shrestha

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ABSTRACT This study is examined brain drain and its impact on Nepalese Students.

The main objectives of this study are **to assess the** current status **of**

brain drain on its impact on Nepalese students, to examine

the negative outcomes of the migration of skilled professional **causing brain drain**

on Nepalese students and to analyze the positive outcomes of skilled migration leading to brain drain on Nepalese students. Employment Prospectus (EP), Economics Uplifts (EU), Education, Personal Ambition (PA) and Migration Policies (MP) are the independent variables and Brain Drain (BD) is the dependent variable in this study. Descriptive statistics,

correlation and multiple regression analysis are taken **to present data. The major finding of this study** were **the correlation**

matrix highlights several strong and significant relationships among the variables. Brain Drain (BD) shows the strongest correlations with Employment Prospectus (EP) and Economic Uplift (EU), indicating that diversification is closely tied to these factors. Education (Edu) also plays a significant role in relation to diversification, economic performance, and environmental uncertainty. Personal Ambition (PA) and Migration Policies (MP), while showing significant correlations with the other variables, generally have weaker relationships. These findings suggest that brain drain, employment prospects, and educational attainment are key factors interconnected with economic uplifts and personal ambition, ultimately impacting migration policies. Comparatively, EP and EU are