

Report: Indian Migrating Students

Project Overview

Project Title: Indian Migrating Students

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Dataset Source: Kaggle (2019–2024)

Data Period: 2019 - 2024

Timeframe Impact: 2020 saw limited student migration due to the COVID-19 pandemic, with data from the first three months being considered for that year.

Objective:

The objective of this project is to analyze the migration patterns of Indian students pursuing higher education abroad. By examining migration trends, course preferences, destination countries, and other related factors, the aim is to provide valuable insights to educational institutions and businesses. The goal is to enhance the understanding of migration behavior, identify gaps, and develop strategies for improving India's educational system while also offering opportunities for businesses that assist students with studying abroad.

This analysis not only seeks to inform the education sector about students' preferences and challenges but also proposes actionable insights for institutions and businesses to **reduce brain drain**, encourage international collaboration, and offer more opportunities to students from all regions, particularly underserved areas.

Problem Statement:

India has one of the largest student populations in the world, with an increasing number of students seeking higher education abroad. However, the migration patterns are often skewed, with a larger percentage of students migrating from wealthier states like Delhi, Maharashtra, and Gujarat. This creates a disparity in opportunities for students from less affluent regions.

Educational institutions and businesses supporting student migration often miss out on tapping into these underserved populations. At the same time, the **Indian educational system**

faces challenges in providing global-level opportunities, support, and scholarships to students from all backgrounds, leading to a **brain drain** that affects the nation's growth and innovation.

Additionally, the **COVID-19 pandemic in 2020** disrupted student migration, with the data for that year reflecting a limited number of migrations due to travel restrictions and lockdowns. By analyzing migration data from 2019 to 2024, this project aims to provide **insights into the evolving trends** and help stakeholders (both educational institutions and businesses) make informed decisions to foster a more inclusive and globally competitive educational ecosystem in India.

Dashboard Overview:

This dashboard provides a detailed analysis of the migration trends of Indian students across various destination countries, chosen courses, and student demographics, from 2019 to 2024. It visualizes important key metrics such as gender distribution, state-wise migration patterns, course choices, visa types, and the trend of admissions over the years.

Key Metrics:

1. **Gender Distribution:** Male vs. Female students.
2. **State-wise Distribution:** Where students are migrating from in India.
3. **Course Chosen:** Popular courses among students.
4. **Visa Type vs. Destination Country:** Migration by visa type across various countries.
5. **Year-wise Admission Trends:** Trends over the years showing changes in student migration, with a special note on 2020.

Data Analysis:

1. Gender Distribution:

- **Male Students:** 58.59%
- **Female Students:** 41.41%

2. State-wise Distribution of Students:

- The highest number of students come from **Delhi** (38 students), **Gujarat** (25 students), and **Maharashtra** (27 students). These states have a higher representation in the data, likely due to better access to resources, international exposure, and financial ability to study abroad.

3. Course Chosen:

- **Top Courses:**
 - **Engineering:** 12 students
 - **Business:** 14 students
 - **Computer Science:** 8 students
 - **Medicine:** 9 students

4. Visa Type vs. Destination Country:

- The **USA** remains the most popular destination for students, with **29 students** migrating there, followed by **Australia** (34 students), **UK** (23 students), and **Singapore** (23 students).
- The most common visa types are **F-1**, **H-1B**, and **M-1**, which are predominantly used for students migrating to the USA, Australia, and Canada.

5. Year-wise Admission Trend:

- The number of students migrating abroad has seen a steady increase, with a **peak in 2023** (40 students).
- In 2020, the number of migrations was limited due to COVID-19, with data reflecting migrations only in the first three months of the year.

Key Insights:

1. Gender Trends:

- There is a notable **gender disparity**, with a higher number of male students migrating abroad (58.59%). This presents an opportunity for businesses and educational institutions to promote **gender equality** in educational migration and offer targeted support to female students, particularly in STEM fields.

2. State-wise Disparity:

- Students from states like **Delhi**, **Maharashtra**, and **Gujarat** dominate migration patterns. **Business opportunities** for study-abroad services can focus on reaching

students from regions with lower migration rates, such as **Tamil Nadu, West Bengal, and Karnataka**. Targeted scholarship programs, career counseling, and access to international education can help bridge this gap.

3. Course Preferences:

- **Engineering and Medicine** are among the most chosen courses. Educational institutions and businesses focusing on these fields can further support students with **scholarships, guidance, and partnerships** with foreign universities.

4. COVID-19 Impact:

- The pandemic severely impacted student migration in 2020. Understanding the temporary shift in student migration during this period can help businesses and institutions plan for future disruptions and adapt to changing global situations.

5. Destination Preferences:

- The **USA** remains the dominant destination for Indian students, but there is increasing interest in countries like **Australia, Canada, and Germany**. This suggests that businesses and institutions should expand their focus to these emerging markets, offering **financial aid, visa support, and career pathways** for students.

Recommendations for Educational Institutions and Study-Abroad Service Providers:

1. For Educational Institutions:

- **Expand outreach to underserved regions**, ensuring students from all states have access to scholarships, mentorship, and international opportunities.
- Promote **gender inclusivity** in higher education programs, especially in STEM fields, by offering special programs for female students.
- **Leverage partnerships with international universities** to create more affordable pathways for students from economically weaker sections.

2. For Study-Abroad Service Providers:

- Target states with **lower migration numbers** and offer tailored **financial aid, scholarships, and career guidance**.
- Adapt to the growing interest in countries like **Canada and Germany**, offering specialized services for these destinations.

- Create programs to help students during **global disruptions**, ensuring continued access to educational opportunities, even in times of crisis like COVID-19.
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Conclusion:

This analysis of Indian student migration trends reveals both opportunities and challenges. While students from wealthier states dominate the migration patterns, there is a significant opportunity for educational institutions and businesses to reach underserved regions and create a more **inclusive** and **equitable** educational system.

By offering targeted scholarships, outreach programs, and partnerships, both the **Indian educational system** and **study-abroad service providers** can foster a **globally competitive and inclusive education ecosystem**, ensuring that students from all backgrounds have equal opportunities to pursue international education, while also reducing the **brain drain**.