

SOCIO-ECONOMIC ANALYSIS OF EMIGRATION FROM KERALA TO THE UNITED STATES OF AMERICA

Thesis Submitted to the
UNIVERSITY OF CALICUT
For the award of the Degree of

DOCTOR OF PHILOSOPHY IN ECONOMICS

By

ABDUL RASHEED.M
(U.O.No. 17719/2019/Admn. Dated, 19.12.2019)

Under the supervision of

Dr. SHIBINU. S
Associate Professor and Head
Department of Economics
PSMO College &
Research Guide, Department of Economics
EMEA College of Arts and Science
Kondotty



Research and Postgraduate Department of Economics
EMEA College of Arts and Science
Kondotty
August 2024

DECLARATION

I, hereby declare that the work presented in the thesis entitled '**SOCIO-ECONOMIC ANALYSIS OF EMIGRATION FROM KERALA TO THE UNITED STATES OF AMERICA**' is based on original work done by me under the guidance of Dr. SHIBINU. S, Associate Professor and Head, Department of Economics, PSMO College & Research Guide, Department of Economics, EMEA College of Arts and Science, Kondotty. This work has not been included in any other thesis submitted previously for the award of any degree. The contents of the thesis have undergone a plagiarism check using iThenticate software at C.H.M.K Library, University of Calicut, and the similarity index is within the permissible limit. I also declare that the thesis is free from AI-generated content.



Place: Kondotty.

Abdul Rasheed.M.

Date:

Signature of the Supervising teacher



Dr. Shibinu. S
Associate Professor and Head
Department of Economics
PSMO College &
Research Guide, Department of Economics
EMEA College of Arts and Science, Kondotty

CERTIFICATE

This is to certify that the dissertation entitled '**SOCIO-ECONOMIC ANALYSIS OF EMIGRATION FROM KERALA TO THE UNITED STATES OF AMERICA**' is a record of the original work done by **Abdul Rasheed. M** under my guidance and supervision. The research results presented in this thesis have not previously formed the basis for the award of any degree, diploma, or certificate of this institute or any other institute or university.



Date:

Dr. Shibinu. S
Associate Professor and Head
Department of Economics
PSMO College &
Research Guide, Department of Economics
EMEA College of Arts and Science, Kondotty



Dr. Ibrahim Cholakkal
Co-Guide
Professor
Department of Economics
EMEA College of Arts and Science, Kondotty

ACKNOWLEDGEMENT

When the weight of challenges appeared impossible, I turned to the Almighty for relief and guidance. His divine presence lightened my path, proposing comfort and strength in times of uncertainty. Through His boundless mercy and grace, I discovered resilience within myself. In the depths of struggle, His firm love became my anchor, guiding me through the stormy seas of life with steadfast assurance. For His eternal kindness and unwavering support, I offer my deepest gratitude and reverence.

Successful completion of any serious research work requires competent guidance and timely advice. In that sense, I have been immensely fortunate to have Dr. Shibinu. S, Associate Professor and Head of the Department of Economics, PSMO College, and Research Guide at the Research and Postgraduate Department of Economics, EMEA College of Arts and Science, Kondotty, as my Supervisor. I express my profound gratitude to Dr. Shibinu S., whose professional approach to research and academic brilliance propelled this doctoral work. His unrelenting support throughout my research journey and his constant feedback helped me to refine my ideas to the fullest extent. His dedication and valuable advice played a crucial role in the successful completion of this research work.

I also extend my deepest sense of gratitude to Professor (Dr.) Ibrahim Cholakkal, my Co-Guide and Research Guide at EMEA College of Arts and Science, Kondotty. His unwavering support and guidance were invaluable throughout my research.

I would like to express my heartfelt thanks to Mr. Abdurazaque P.M, Head of the Department of Economics, EMEA College, Mr. Mohammed Najeeb P.M, Former HOD, Dr. Hussain V, and Mr. Mohammed Nisar T.V, Assistant Professors, Department of Economics, EMEA College of Arts and Science, Kondotty and Dr. Rajasekharan K.E, Assistant Professor, Department of Statistics, EMEA College of

Arts and Science, Kondotty, Dr. Saleel Ahammed A.K, guest faculty, EMEA College of Arts and Science, Kondotty for their motivating suggestions.

I am grateful to Prof. (Dr.) Riyad A.M, Principal, EMEA College of Arts and Science, Kondotty, for his co-operation and continued support. I acknowledge the sincere support of the former principals, Dr. Abdulla M.P, Dr. Ayoob C.P, Lt. Abdul Rasheed P, and Abdul Muneer V, EMEA College of Arts and Science, Kondotty.

With much gratitude, I acknowledge the bits of advice rendered by Dr. Zabeena Hameed P, Head of the Department of Economics at John Matthai Center, University of Calicut, Dr. Shyjan Davis, Associate Professor, Department of Economics at John Matthai Center, University of Calicut, Professor (Dr.) Shaheed Ramzan C.P, Head of the Department of Economics, Government Arts and Science College, Calicut, Dr. Abdul Azeez N.P, Assistant Professor, Aligarh Muslim University, and Dr. Ramla A and Noushad Chengodan, Assistant Professors, Department of Economics, PSMO College, Tirurangadi. I extend my sincere gratitude to Dr. Hyderali K, Dr Rahul. K, Dr. Sujin. K.N, Dr. Sukumaran. M, Prem Kumar. M. and Naseef. K for their timely help and support, which significantly contributed to the success of my research.

With immense pleasure, I extend my heartfelt thanks to Dr. Muhammed Ashiq Villanthenkodath, Assistant Professor, IIM Bodhgaya, Arjun K, Assistant Professor, SRM University, Amidhali. V, Research Scholar, Farook College, Shabareesh. K, Statistical Investigator, Department of Statistics and Economics, Perinthalmanna, Dr. Vipin. V, Assistant Professor at IISER, Bhopal, Muhammed Shameer K, Assistant Professor of Economics, Dr.B.R Ambedkar School of Economics, Bengaluru and Krishna Priya. K, MA Psychology Student, IGNOU for their invaluable assistance and support during my research analysis.

I am grateful to my co-research fellows at EMEA College of Arts and Science, Kondotty, including Abid Rahman. K, Sabira. A, Nusaiba. K P, Umaira. K K, Soumya. T, Nasira Banu. M, Sreeja. A, Amrutha. P, Mansoor. P, Shoniya. K, and Saeeda. P.

I also express my sincere thanks to Dr. K. Muhammed Jamsheer Naha, Principal, Malabar Central School, Raoof Wafy, Shuhaib Wafy, Jamaludheen Wafy, Shaziya International College, Rafeek Ali Hudawi, Jahfar Hudawi Kolathoor and Rahees Hudawi, Darul Huda Islamic University for their immense support and inspiration during my research.

I extend my gratitude to the librarians of Dr. John Mathai Centre, Thrissur, Centre for Development Studies, Thiruvananthapuram and C.H Mohammed Koya Library, University of Calicut, for their invaluable assistance. I thankfully acknowledge the help and cooperation extended to me by the administrative staff of EMEA College of Arts and Science, Kondotty.

Finally, I am indebted to my beloved father and mother for their prayers and support. I register my love to my better half Basila, daughters Sheza Mariyam and Airah Fathima and brother and sisters for their unwavering, affectionate encouragement. They put up with my continuous absence in familial affairs and the consequent neglect of other important matters due to lack of time. I owe them a tremendous debt of gratitude.

Abdul Rasheed.M.

ABSTRACT

The socio-economic dynamics of emigration from Kerala to the United States of America exhibit a unique migration pattern compared to migration to the Gulf region. This is because migration to the US is characterized predominantly by a skilled emigrant population. This study has four objectives: (1) Analysing the socio-economic characteristics of both migrants and non-migrants, (2) Identifying the accelerators and brake pedal of the Indian economy in the context of migration, (3) Evaluating the endowments and capabilities that help to respond to the factors contributing to migration from Kerala, and (4) Analysing the impact of emigration on migrant households. This study involves a comparative analysis of migrant and non-migrant households. The literature shows that most of the research on migration addresses the reasons for emigration, the impact of remittances on the economy, return migration and the influence of migration on the psychological well-being of the parents left behind. All these studies were exclusively focused on migration to the Gulf region. Examining emigration to the USA, unfolding the inner dynamics and rationalising the nuances using suitable theoretical underpinnings to explain the underlying factors is a less ventured arena. Therefore, it is crucial to investigate emigration from Kerala to the US, its implications, its determinants and the impact on migrant households. Data for this study were collected from two districts of Kerala, Pathanamthitta and Kottayam, which are considered significant migrant pockets to the US. The total sample size for this study is 358, comprising 143 migrant households and 215 non-migrant households.

A descriptive analysis is carried out to trace the socio-economic characteristics of both migrants and non-migrants. The analysis reveals that younger individuals, particularly those around thirty years old, are more likely to migrate with males dominating the migrant demographic. Christians form the majority of the migrant community, likely due to established social networks in the US. Most migrants hold postgraduate degrees, indicating a significant brain drain and the majority work in nursing, highlighting the high demand for healthcare professionals in the US. The notable thing is that despite their educational qualifications, some migrants face the problem of underemployment. In the context of migration, this phenomenon is called brain waste. Additionally, professions like doctors, engineers, business, company lawyers and system analysts are solely occupied by the Male population. Christians dominate in jobs like anesthesia technician, legal advisor,

system analyst, accountant and microbiologist. The characteristics of non-migrants reveal that the majority are younger to middle-aged and belong to the Hindu community. Both Hindus and Christians are predominantly involved in rubber tapping and degree holders often work in jobs like sales and construction, highlighting employment challenges among the educated non-migrant community. To examine the second objective, the Auto Regressive Distributed Lag model (ARDL) was employed. The result of the ARDL shows that emigration is negatively correlated with India's economic growth but positively correlated with human capital development and population density. This suggests that increasing domestic economic opportunities may reduce the pace of emigration from India to the USA, thereby addressing the problem of brain drain. The Logistic regression model (LOGIT) is used to analyse the third objective, the influence of individual (age & education), social (religion & social networks), family (land owned) endowments and gender on emigration from Kerala to the USA. Endowment means anything that a person possesses and that enhances the choice of the people. The results indicate that compared to females the probability of emigration among males is high, and the Christian community is more likely to migrate compared to non-Christians. Moreover, the results show that pre-existing social networks in the USA significantly increase the probability of migration. The overall result of LOGIT shows that social and human capital factors, including educational attainment and family resources, are crucial in migration. Finally, this study examines the impacts of emigration on migrant households. The impacts of emigration on migrant households are quite visible, with increased asset accumulation and a higher standard of living in the post-migration period, caused by remittances and increased earnings. Emigration increases the asset holdings of migrant households compared to non-migrant households and also enhances the standard of living through spillover effects. However, no significant differences in the standard of living were found among different religious communities within migrant households. These findings underline the positive effects of migration on the growth of assets and living standards of migrant households after migration.

Keywords: Brain Drain, Brain gain, Brain waste, Human Development, Population Density, Accelerator, Brake Pedal, Endowments, Spillover effect.

സംഗ്രഹം

കേരളത്തിൽ നിന്ന് അമേരിക്കയിലേക്കുള്ള കുടിയേറ്റത്തിന്റെ സാമൂഹിക-സാമ്പത്തിക പ്രക്രിയകൾ ഗൾഫ് മേഖലയിലേക്കുള്ള കുടിയേറ്റവുമായി താരതമ്യപ്പെടുത്തുമ്പോൾ വ്യത്യസ്തമാണ്. കാരണം, അമേരിക്കയിലേക്കുള്ള കുടിയേറ്റം പ്രധാനമായും വൈദഗ്ദ്ധ്യമുള്ള കുടിയേറ്റ ജനതയുടെ സവിശേഷതയാണ്. ഈ പഠനം നാല് അടിസ്ഥാന ലക്ഷ്യങ്ങളിൽ ഊന്നിയിരിക്കുന്നു : (1) കുടിയേറ്റക്കാരുടെയും കുടിയേറ്റക്കാർ അല്ലാത്തവരുടെയും സാമൂഹിക-സാമ്പത്തിക സവിശേഷതകൾ വിശകലനം ചെയ്യുക, (2) കുടിയേറ്റത്തിന്റെ പശ്ചാത്തലത്തിൽ ഇന്ത്യൻ സമ്പദ്‌വ്യവസ്ഥയുടെ ആക്സിലറേറ്ററും ബ്രേക്ക് പെഡലും തിരിച്ചറിയുക(3) കേരളത്തിൽ നിന്ന് അമേരിക്കയിലേക്കുള്ള കുടിയേറ്റത്തിന് ഉപോൽബലകമാകുന്ന ഘടകങ്ങളോട് പ്രതികരിക്കാൻ സഹായിക്കുന്ന എൻഡോവ്മെന്റുകളും കഴിവുകളും വിലയിരുത്തുക, (4) കുടിയേറ്റ കുടുംബങ്ങളിൽ കുടിയേറ്റം ചെലുത്തുന്ന സ്വാധീനം വിശകലനം ചെയ്യുക. ഈ പഠനത്തിൽ കുടിയേറ്റ കുടുംബങ്ങളുടെയും കുടിയേറ്റേതര കുടുംബങ്ങളുടെയും ഒരു താരതമ്യ പഠനമാണ് നടത്തുന്നത്. കുടിയേറ്റത്തെക്കുറിച്ചുള്ള മിക്ക ഗവേഷണങ്ങളും കുടിയേറ്റക്കാർ നാട്ടിലേക്ക് അയക്കുന്ന പണത്തിന്റെ സമ്പദ്ഘടനയിലെ സ്വാധീനം, ആഘാതം, കുടിയേറ്റക്കാരുടെ തിരിച്ച വരവ് നാട്ടിൽ ഒറ്റപ്പെട്ട മാതാപിതാക്കളുടെ മാനസിക ക്ഷേമത്തിൽ കുടിയേറ്റത്തിന്റെ സ്വാധീനം എന്നിവയെക്കുറിച്ചാണ്. ഈ പഠനങ്ങളെല്ലാം ഗൾഫ് മേഖലയിലേക്കുള്ള കുടിയേറ്റത്തെ കേന്ദ്രീകരിച്ചായിരുന്നു. എന്നാൽ അമേരിക്കയിലേക്കുള്ള കുടിയേറ്റം വിശകലനം ചെയ്യുക, അതിന്റെ ആന്തരിക ചലനാത്മകത വ്യക്തമാക്കുക, അനുയോജ്യമായ സൈദ്ധാന്തിക അടിത്തറ ഉപയോഗിച്ച് വിശകലനങ്ങൾ യുക്തിസഹമാക്കുക എന്നിവയാണ് ഈ ഗവേഷണത്തെ മറ്റുള്ള ഗവേഷണങ്ങളിൽ നിന്ന് വേറിട്ട് നിർത്തുന്നത്. അതിനാൽ, കേരളത്തിൽ നിന്ന് അമേരിക്കയിലേക്കുള്ള കുടിയേറ്റം, അതിന്റെ പ്രത്യാഘാതങ്ങൾ, അതിനെ നിർണയിക്കുന്ന ഘടകങ്ങൾ, കുടിയേറ്റ കുടുംബങ്ങളിലെ ആഘാതം എന്നിവ പഠന വിധേയമാക്കേണ്ടതുണ്ട്. അമേരിക്കയിലേക്കുള്ള കുടിയേറ്റക്കാരുടെ പ്രധാന ഉറവിടമായി കണക്കാക്കപ്പെടുന്ന കേരളത്തിലെ രണ്ട് ജില്ലകളായ പത്തനംതിട്ട, കോട്ടയം എന്നിവിടങ്ങളിൽ നിന്നാണ് ഈ പഠനത്തിനായി വിവരങ്ങൾ ശേഖരിച്ചത്. ഈ പഠനത്തിന്റെ ആകെ സാമ്പിൾ വലുപ്പം 358 ആണ്, അതിൽ 143 കുടിയേറ്റ കുടുംബങ്ങളും 215 കുടിയേറ്റേതര കുടുംബങ്ങളും ഉൾപ്പെടുന്നു.

കുടിയേറ്റക്കാരുടെയും കുടിയേറ്റക്കാർ അല്ലാത്തവരുടെയും സാമൂഹിക-സാമ്പത്തിക സവിശേഷതകൾ കണ്ടെത്തുന്നതിന് ഒരു വിവരണാത്മക വിശകലനം ഈ പഠനത്തിൽ നടത്തുന്നു. കുടിയേറ്റ ജനസംഖ്യാശാസ്ത്രത്തിൽ പുരുഷന്മാർ ആധിപത്യം പുലർത്തിപ്പോരുന്നു. ഈ പ്രവണത ചെറുപ്പക്കാർ, പ്രത്യേകിച്ച് ശരാശരി മുപ്പത് വയസ്സ് പ്രായമുള്ളവർ കേരളത്തിൽ നിന്ന് അമേരിക്കയിലേക്ക് കുടിയേറാനുള്ള സാധ്യത കൂടുതലാണെന്ന് വെളിപ്പെടുത്തുന്നു. അമേരിക്കയിൽ ലഭ്യമായ സാമൂഹിക നെറ്റ്‌വർക്കുകളുടെ സഹായം മൂലം കുടിയേറ്റ സമൂഹത്തിൽ ഭൂരിഭാഗവും ക്രിസ്ത്യാനികളായാണ് കാണപ്പെടുന്നത്. മിക്ക കുടിയേറ്റക്കാരും ബിരുദാനന്തര ബിരുദധാരികളാണ്, ഇത് പ്രകടമായ മസ്തിഷ്ക ചോർച്ചയെ സൂചിപ്പിക്കുന്നു. ഭൂരിപക്ഷം പേരും നഴ്സിംഗിൽ ജോലി ചെയ്യുന്നതു അമേരിക്കയിലെ ഹെൽത്ത് കെയർ പ്രൊഫഷണലുകളുടെ ഉയർന്ന ഡിമാൻഡ് എടുത്തുകാണിക്കുന്നു. വിദ്യാഭ്യാസ യോഗ്യതയുണ്ടെങ്കിലും, ചില കുടിയേറ്റക്കാർ തൊഴിലില്ലായ്മയുടെ പ്രശ്നം നേരിടുന്നു എന്നത് ശ്രദ്ധേയമായ കാര്യമാണ്. കൂടാതെ, ഡോക്ടർമാർ, എഞ്ചിനീയർമാർ, ബിസിനസ്സ്, കമ്പനി അഭിഭാഷകർ, സിസ്റ്റം അനലിസ്റ്റുകൾ

തുടങ്ങിയ തൊഴിലുകൾ പുരുഷന്മാർ മാത്രമാണ് ചെയ്യുന്നത്. അനസ്തേഷ്യ ടെക്നീഷ്യൻമാർ, നിയമ ഉപദേശകർ, സിസ്റ്റം അനലിസ്റ്റുകൾ, അക്കൗണ്ടന്റ്മാർ, മൈക്രോബയോളജിസ്റ്റുകൾ തുടങ്ങിയ ജോലികളിൽ ക്രിസ്ത്യൻ വിഭാഗങ്ങൾ ആധിപത്യം പുലർത്തുന്നു. എന്നാൽ കടിയേറ്റക്കാരല്ലാത്തവരുടെ സ്വഭാവസവിശേഷതകൾ വെളിപ്പെടുത്തുന്നത് ഭൂരിഭാഗവും ചെറുപ്പക്കാർ മുതൽ മധ്യവയസ്സ് വരെയുള്ളവരും ഹിന്ദു സമുദായത്തിൽപ്പെട്ടവരുമാണ് എന്നതാണ്. കടിയേറ്റക്കാരല്ലാത്തവരിൽ പലരും ബിരുദങ്ങൾ നേടിയിട്ടും റബ്ബർ ടാപ്പിംഗ്, വിൽപ്പന തുടങ്ങിയ തൊഴിലുകളിൽ ഏർപ്പെടുന്നു, ഇത് കേരളത്തിൽ വിദ്യാഭ്യാസവും തൊഴിലവസരങ്ങളും തമ്മിലുള്ള പൊരുത്തക്കേട് കാണിക്കുന്നു. കൂടാതെ ബിരുദധാരികൾ പലപ്പോഴും സെയിൽസ്, നിർമ്മാണം തുടങ്ങിയ ജോലികളിൽ പ്രവർത്തിക്കുന്നു. ഇതെല്ലാം കടിയേറ്റേതര സമൂഹങ്ങൾക്കിടയിലെ തൊഴിൽ വെല്ലുവിളികൾ ഉയർത്തിക്കാട്ടുന്നു. ഈ പഠനത്തിന്റെ രണ്ടാമത്തെ ലക്ഷ്യം പരിശോധിക്കുന്നതിനായി, ഓട്ടോ റിഗ്രസീവ് ഡിസ്ട്രിബ്യൂട്ടഡ് ലാഗ് മോഡൽ (ARDL) ഉപയോഗിച്ചു. ARDL-ന്റെ ഫലം കാണിക്കുന്നത് ഇന്ത്യയിൽ നിന്നും അമേരിക്കയിലേക്കുള്ള കടിയേറ്റം ഇന്ത്യയുടെ സാമ്പത്തിക വളർച്ചയുമായി പ്രതികൂലമായി ബന്ധപ്പെട്ടിരിക്കുന്നുവെന്നും എന്നാൽ മനുഷ്യ മൂലധന വികസനം, ജനസാന്ദ്രത എന്നിവയുമായി ക്രിയാത്മകമായി (നേരിട്ടു) ബന്ധപ്പെട്ടിരിക്കുന്നുവെന്നുമാണ്. ആഭ്യന്തര സാമ്പത്തിക അവസരങ്ങൾ വർദ്ധിക്കുന്നത് കടിയേറ്റത്തിന്റെ വേഗത കുറയ്ക്കുകയും അതുവഴി മസ്തിഷ്ക ചോർച്ച പ്രശ്നം പരിഹരിക്കുകയും ചെയ്യുമെന്നുമാണ് പഠനം സൂചിപ്പിക്കുന്നത്. ഈ പഠനത്തിന്റെ മൂന്നാമത്തെ ലക്ഷ്യം പരിശോധിക്കാൻ ലോജിസ്റ്റിക് റിഗ്രഷൻ മോഡൽ (LOGIT) ഉപയോഗിക്കുന്നു. കേരളത്തിൽ നിന്ന് അമേരിക്കയിലേക്കുള്ള പ്രവാസത്തിൽ വിവിധ എൻഡോവ്മെന്റുകൾ ആയിട്ടുള്ള വ്യക്തികൾ എൻഡോവ്മെന്റ് (പ്രായവും വിദ്യാഭ്യാസവും), സാമൂഹിക എൻഡോവ്മെന്റ് (മതവും സോഷ്യൽ നെറ്റ്‌വർക്കുകളും), കുടുംബ എൻഡോവ്മെന്റ് (കുടുംബത്തിന്റെ ഭൂമി), ലിംഗഭേദം എന്നിവയുടെ സ്വാധീനം എന്നതാണ്. എൻഡോവ്മെന്റ് എന്നാൽ ഒരു വ്യക്തിയുടെ കൈവശമുള്ളതും ജനങ്ങളുടെ തിരഞ്ഞെടുപ്പിനെ മെച്ചപ്പെടുത്തുന്നതുമായ എന്തും എന്നാണ് അർത്ഥമാക്കുന്നത്. സ്ത്രീകളുമായി താരതമ്യപ്പെടുത്തുമ്പോൾ, പുരുഷന്മാർക്കിടയിൽ കടിയേറ്റാനുള്ള സാധ്യത കൂടുതലാണെന്നും മറ്റു മതവിഭാഗങ്ങളെ അപേക്ഷിച്ച് ക്രിസ്ത്യൻ സമൂഹം കടിയേറ്റാനുള്ള സാധ്യത കൂടുതൽ ആണെന്നും ഫലം കാണിക്കുന്നു. കൂടാതെ, അമേരിക്കയിൽ നിലവിലുള്ള സമൂഹിക നെറ്റ്‌വർക്കുകൾ കടിയേറ്റത്തിന്റെ സാധ്യത ഗണ്യമായി വർദ്ധിപ്പിക്കുന്നുവെന്നും വിശകലനങ്ങൾ കാണിക്കുന്നു. LOGIT-ന്റെ മൊത്തത്തിലുള്ള ഫലം കാണിക്കുന്നത്, വിദ്യാഭ്യാസനേട്ടങ്ങളും കുടുംബ വിഭവങ്ങളും ഉൾപ്പെടെയുള്ള സാമൂഹികവും മാനുഷികവുമായ മൂലധന ഘടകങ്ങൾ കടിയേറ്റത്തെ ക്രിയാത്മകമായി സ്വാധീനിക്കുന്നു. അവസാനമായി ഈ പഠനം അമേരിക്കയിലേക്കുള്ള കടിയേറ്റം നാട്ടിലുള്ള കുടുംബങ്ങളിൽ ചെലുത്തുന്ന സ്വാധീനം പരിശോധിക്കുന്നു. പ്രവാസി കുടുംബങ്ങളിൽ കടിയേറ്റത്തിന്റെ സ്വാധീനം വളരെ ദൃശ്യമാണ്. വർദ്ധിച്ചുവരുന്ന ആസ്തി ശേഖരണവും കടിയേറ്റാനന്തര കാലഘട്ടത്തിൽ ഉയർന്ന ജീവിത നിലവാരവും, പണമടയ്ക്കലും വർദ്ധിച്ചു വരാനും കാരണമാകുന്നു. കടിയേറ്റക്കാരല്ലാത്ത കുടുംബങ്ങളെ അപേക്ഷിച്ച് കടിയേറ്റ കുടുംബങ്ങളുടെ ആസ്തി വർദ്ധിക്കുകയും സ്റ്റിൽഓവർ ഇഫ്ക്ലിലൂടെ ജീവിത നിലവാരം ഉയരുകയും ചെയ്യുന്നു എന്നതും മനസ്സിലാക്കാം. കൂടാതെ കടിയേറ്റ കുടുംബങ്ങളിലെ വിവിധ മതവിഭാഗങ്ങൾക്കിടയിൽ ജീവിതനിലവാരത്തിൽ കാര്യമായ വ്യത്യാസങ്ങളൊന്നും കാണാനായില്ല. കടിയേറ്റത്തിന് ശേഷമുള്ള കടിയേറ്റ കുടുംബങ്ങളുടെ ആസ്തികളുടെയും ജീവിതനിലവാരത്തിന്റെയും വളർച്ചയിൽ കടിയേറ്റത്തിന്റെ ഗുണപരമായ ഫലങ്ങൾ ഈ കണ്ടെത്തലുകൾക്ക് അടിവരയിടുന്നു.

CONTENTS

List of Tables

List of Figures

List of Abbreviations

Chapter No.	Title	Page No.
1	Introduction.	1-30
1.1	Introduction.	1
1.2	Research Problem.	7
1.3	Significance of the Study.	8
1.4	Research Gap.	10
1.5	Research Questions.	11
1.6	Objectives of the Study.	11
1.7	Hypotheses.	11
1.8	Data and Methodology.	12
1.9	Chapterisation.	28
1.10	Limitations of the Study.	30
2	Conceptual Issues and Empirical Studies.	31-70
2.1	Introduction.	31
2.2	Basic Terms.	34
2.3	Theoretical Understanding.	37
2.4	Understanding Studies on Emigration- A Review.	41
2.5	Conclusion.	70
3	Emigration to the USA.	71-92
3.1	Introduction.	71
3.2	Trends in Global Migration.	73
3.3	Emigration from India to the US: An Overview.	77
3.4	H-1B Visa.	86
3.5	Green Card.	87
3.6	Emigration from Kerala.	88
3.7	Conclusion.	92
4	Socio-Economic Characteristics of Migrants and Non-Migrants.	93-116
4.1	Introduction.	93
4.2	Analysis of Socio-Economic Characteristics of Migrants.	93
4.3	Analysis of Socio-Economic Characteristics of Non-Migrants.	105

4.4	Conclusion.	114
5	Accelerators and Brake Pedal of Emigration to the USA.	117-126
5.1	Introduction.	117
5.2	Results and Discussion.	118
5.3	Conclusion.	124
6	Emigration from Kerala to the USA: The Endowments and Capabilities.	127-144
6.1	Introduction.	127
6.2	Logistic Regression and Migration Probabilities	132
6.3	Endowments: A Brief Overview.	133
6.4	Conclusion.	143
7	Impact of Emigration.	145-164
7.1	Introduction.	145
7.2	Impact of Emigration on Asset Holding: An Inter-Analysis.	145
7.3	Impact of Emigration on Changes in Asset Holding in the Post-Migration Period: An Intra-Analysis.	147
7.4	Impact of Emigration on the Standard of Living: An Inter-Analysis.	152
7.5	Impact of Emigration on the Standard of Living of Different Religious Communities: An Intra-Analysis.	156
7.6	Conclusion.	162
8	Findings and Conclusion	165-188
8.1	Introduction.	165
8.2	Major Findings.	166
8.3	Policy Implications.	182
8.4	Scope for Further Research.	184
8.5	Conclusion.	185
	References	
	Appendix.	

LIST OF TABLES

<i>Table No.</i>	<i>Title</i>	<i>Page No.</i>
1.1	Samples Selected for the Primary Survey, 2023.	15
1.2	Samples From each Taluks of Pathanamthitta and Kottayam.	16
3.1	Key Facts and Figures of Current Global Migration.	74
3.2	Trends in the Number of International Migrants since 1970.	75
3.3	Top Rated Destinations and Origins of International Migrants (2020).	76
3.4	Top Three Countries of Remittance Receipts (2021).	77
3.5	Top Three Countries of Destination of Indian Emigrants (2020).	82
3.6	Remittances to India in Different Fiscal Years (Since 1990).	83
3.7	Country-Wise Share of Inward Remittances to India (2021).	84
3.8	Changes in the Immigrant Population in the US from the Top Three Origin Countries (1980-2019).	84
3.9	Number of Indian Students in the US since Independence.	85
3.10	H-1B Visa Issued Per Annum (1990-2019).	86
3.11	Green Card Issued to Indians in the US (2014-2019).	88
3.12	Country of Residence of Emigrants from Kerala (1998-2018).	89
4.1	Gender-Wise Distribution of the Emigrants.	94
4.2	Marital Status of the Emigrants.	95
4.3	Educational Status of the Emigrants.	96
4.4	Occupational Profile of the Emigrants.	97
4.5	Citizenship Status of the Emigrants.	98
4.6	City-Wise Distribution of the Emigrants in the US.	99
4.7	Gender-Wise Educational Status of the Emigrants.	100
4.8	Gender-Wise Occupational Profile of the Emigrants.	101
4.9	Religious-Wise Occupational Profile of the Emigrants.	102
4.10	Education-Wise Occupational Profile of the Emigrants.	103
4.11	Occupational Profile by Citizenship Status.	105
4.12	Age Distribution of the Non-Migrants.	106
4.13	Religious Composition of the Non-Migrants.	106
4.14	Gender-Wise Distribution of the Non-Migrants.	107

4.15	Marital Status of the Non-Migrants.	107
4.16	Educational Status of the Non-Migrants.	108
4.17	Occupational Profile of the Non-Migrants.	109
4.18	Gender-Wise Educational Status of the Non-Migrants.	110
4.19	Gender-Wise Occupational Profile of the Non-Migrants.	111
4.20	Religious-Wise Occupational Profile of the Non-Migrants.	112
4.21	Education-Wise Occupational Profile of the Non-Migrants.	113
5.1	Descriptive Statistics.	119
5.2	Unit Root Test Results.	119
5.3	The Results of the ARDL Cointegration Test.	120
5.4	Long and Short Runs Result Estimates.	121
6.1	Age Status of the Migrants and Non-Migrants.	128
6.2	Educational Status of the Migrants and Non-Migrants.	128
6.3	Gender Status of the Migrants and Non-Migrants.	129
6.4	Landholding Status of Migrant and Non-Migrant Families.	130
6.5	Religious Status of the Migrants and Non-Migrants.	131
6.6	Social Networks Status of the Migrants and Non-Migrants.	132
6.7	Model Information (LOGIT).	134
6.8	Categorical Variable Information.	135
6.9	Continuous Variable Information.	136
6.10	Classification Table ^{a,b} .	137
6.11	Variables in the Equation.	138
6.12	Variables Not in the Equation.	139
6.13	Omnibus Tests of Model Coefficients.	139
6.14	Pseudo R square and Model's Fit.	140
6.15	Logit Coefficient and Odds ratio.	141
7.1	Asset Holding: Migrant Households vs Non-Migrant Households.	146
7.2	Impact of Emigration on the Asset Holding: Migrant Households vs Non-migrant Households.	146
7.3	Asset Holding: Pre-Migration Period.	148
7.4	Test of Normality.	148
7.5	Asset Holding: Post-Migration Period.	149
7.6	Test of Normality.	149
7.7	Impact of Emigration on Asset Holding During Post-Migration: An Intra-Analysis.	150
7.8	Wilcoxon Signed Rank Test Results.	151

7.9	Annual Consumption Expenditure: Migrant Households vs Non-Migrant Households.	152
7.10	Annual Consumption Expenditure: Migrant Households.	153
7.11	Annual Consumption Expenditure: Non-Migrant Households.	154
7.12	Impact of Emigration on the Standard of Living: Migrant Households vs Non-Migrant Households.	155
7.13	Impact of Emigration on the Standard of Living of Different Religious Communities: An Intra-Analysis.	157
7.14	Kruskal-Wallis Test Results.	157
7.15	Impact of Emigration on the Standard of Living: Hindu vs Muslim Migrant Households.	158
7.16	Impact of Emigration on the Standard of Living: Christian vs Muslim Migrant Households	159
7.17	Mann-Whitney U Test Results.	160
7.18	Impact of Emigration on the Standard of Living: Hindu vs Christian Migrant Households.	160
7.19	Mann-Whitney U Test Results.	161

LIST OF FIGURES

<i>Figure No.</i>	<i>Title</i>	<i>Page No.</i>
3.1	Annual number of Green Card Issued (2000-2019).	87
3.2	Emigration from Kerala to the US: Trends by US Presidential Administration (1998-2018).	91
4.1	Age Distribution of the Emigrants.	93
4.2	Religious Composition of the Emigrants.	95
5.1	CUSUM Tests at 5% Level of Significance.	123
5.2	CUSUMsq Tests at 5% Level of Significance.	123

LIST OF ABBREVIATIONS

UN	:	United Nations.
UN DESA	:	United Nations Department of Economic and Social Affairs.
UNDP	:	United Nations Development Programme.
IOM	:	International Organisation for Migration.
US	:	United States.
GCC	:	Gulf Cooperation Council.
EU	:	European Union.
OECD	:	Organisation for Economic Cooperation and Development.
ODR	:	Open Door Report.
ACS	:	American Community Survey.
RBI	:	Reserve Bank of India.
NSSO	:	National Sample Survey Office.
KMS	:	Kerala Migration Survey.
CDS	:	Center for Development Studies.
GMR	:	Global Migration Report.
WMR	:	World Migration Report.
EMIUS	:	Emigration from India to the United States of America.
HC	:	Human Capital.
DP	:	Population Density.
GDP	:	Gross Domestic Product.
ARDL	:	Auto Regressive Distributed Lag.
UECM	:	Unrestricted Error Correction Model.
ECT	:	Error Correction Term.
CUSUM	:	Cumulative Sum.
CUSUMQ	:	Cumulative Sum of Squares.
NRIs	:	Non-Resident Indians.
DES	:	Directorate of Economics and Statistics.
CAMM	:	Common Agenda for Migration and Mobility.
MIG	:	Migration Status.
CE	:	Annual Consumption Expenditure.

INTRODUCTION

-
- *Introduction.*
 - *Research Problem.*
 - *Significance of the Study.*
 - *Research Gap.*
 - *Research Questions.*
 - *Objectives of the Study.*
 - *Hypotheses.*
 - *Data and Methodology.*
 - *Chapterisation.*
 - *Limitations of the Study.*
-

1.1. Introduction.

The history of migration can be viewed as the history of the entire world. Throughout the beginning of time, people have been migrating (Shibinu, 2020). Today, human mobility is a crucial feature of the world economy. Since the early 1990s, there has been a strong trend toward the globalisation of money, technology and economic activities. The involvement of multinational and transnational businesses in global corporate activities has increased. Today, trade and financial liberalisation are given more attention. A rapidly shrinking world has been caused by the proliferation of the media, improvements in communication, transportation, technologies and the free flow of knowledge. The exchange of human capital has also been significantly facilitated by international migration. Since it is an integrated ‘one globe’ with more intricately entwined economies, communities and cultures, it is now referred to as a global village (Bahadur, 2012).

Migration is defined differently today than it was in the past, and there is some controversy over this (Clarke, 1965). No matter what, everyone must agree that ‘migration is a kind of geographic or spatial mobility between two geographical entities, usually requiring a change of domicile from the origin to the destination country’ (UN, 1958). Migration can indeed occur within a country’s domestic territory, which is referred to as internal migration, or it can involve movement across national boundaries, known as external migration. Both types of migration involve the movement of people from one place to another, but they occur at different geographic scales.

People have most likely relocated from their place of origin due to environmental problems, natural disasters, population growth relative to resource availability and threats posed by other people or animals (Bodvarsson & Berg, 2009). However, the rationalisation of the causes and motivations of migration has become a topic of debate because many migratory movements in the modern world occur due to different dimensions which are either pushed or pulled (Shibinu, 2020). Specifically, the pull factors in the destination nation play a pivotal role in the decision of a person to move from the origin place. The factors that attract people to

a specific location are referred to as pull factors. These factors may be of an economic, social, cultural, political and environmental character. It takes into account things like high economic prospects, greater educational possibilities, political stability, social and cultural aspects in the country of destination (IOM, 2015). A good illustration of how the pull factors of migration operate is the emigration of people from many parts of the world to the United States. The economic opportunities and freedoms that the US provides are major attractions for immigrants. The vast number of people who travel to the US to work, study, or launch a business is evidence of this (Portes & Rumbaut, 2014). Similarly, Push factors refer to the variables that drive individuals to leave their country of origin and migrate to another country. It includes economic hardship, political instability, environmental factors such as floods, earthquakes and demographic factors like overpopulation and high population density (IOM, 2015). The varying potential of the economies and the resultant variations in the rates of economic growth assume a key place in the decision to migrate (Shibinu, 2020). One study by Massey et al., (1993) looks at the push and pull factors that influence migration. Economic concerns were the primary pull factors, while political unrest and lack of job prospects were the primary push factors, according to a study that examined the migration trends of Mexicans to the US. Thus, push and pull factors are crucial ideas for understanding migratory patterns.

In some regions of the world, large migrations of refugees and asylum seekers are inevitable. People frequently leave their countries due to unpleasant conditions like wars, political disruption or religious persecution. Natural calamities have compelled thousands of people to leave their homes. Migration in such cases is imposed and not voluntarily selected. In reality, these movements have grown to frightening levels and provide significant issues for global policy. The causes of involuntary migratory movements seem to be well understood, while the causes of voluntary movements, particularly in situations that seem typical, seem to be a mystery. Academicians including economists, geographers, historians and sociologists, have tackled the complex issue of understanding the reasons, purposes

and impacts of voluntary migration. While there are many reasons for migration, economic factors are often the primary driving force.

Exploring the historical connections between India and the Gulf region reveals a complex network of trade, commerce and cultural interchange broadening across centuries. These longstanding ties set the stage for a significant influx of Indian labour migration to the Gulf countries during the mid-20th century. This surge in migration was propelled by the rapid economic growth encouraged by the discovery of oil, creating a high demand for labour in sectors such as construction, infrastructure development and oil exploration. Workers from various regions of India, including Kerala, Tamil Nadu, Andhra Pradesh and Uttar Pradesh, sought opportunities in the Gulf, drawn by the promise of employment and improved livelihoods. Their migration not only reshaped the economic landscape of the region but also laid the groundwork for the diverse Indian expatriate communities that continue to thrive in the Gulf today, contributing significantly to the region's development and cultural diversity (Jain, 2005). In addition to migration to the Gulf Cooperation Council (GCC) countries, migration to some of the developed countries also took place during the post-Second World War era.

Initially, migration to countries like the UK and Canada surged due to factors such as colonial ties, wartime experiences and opportunities stemming from the partition of India (Khadria, 2006). These migrations, often facilitated by kinship networks, laid the foundation for larger Indian communities in these nations. Subsequent decades witnessed a notable rise in skilled migration to the United States, which emerged as a prime destination for Indian professionals. The 1965 amendments to the US Immigration and Nationality Act, which prioritised highly trained professionals, facilitated the influx of urban, educated Indians. Despite occasional restrictions, skilled migration from India to the US continued to increase steadily, with Indian immigrants making significant contributions to sectors such as technology, healthcare and academia (Jensen, 1988; Khadria, 2006)).

Large-scale Indian immigration to the United States began following the abolition of national-origin quotas by Congress in 1965, marking a rapid increase in

arrivals from India and other non-European countries. Indians now constitute the second-largest immigrant group in the US, numbering 2.7 million as of 2021, representing 6% of the total foreign-born population. Unlike earlier waves of low-skilled migrant workers, post-World War II Indian immigrants primarily pursued professional jobs or higher education in US institutions. Most Indian immigrants today arrive through employment and family-based pathways, with a significant number enrolled in US higher education and holding employer-sponsored H-1B visas (Hoffman & Batalova, 2022). Indian students further contributed to this trend, forming a vital segment of the skilled migrant pool. The US policy of allowing foreign students to stay and work after completing their degrees, combined with the attraction of prestigious universities and job opportunities, led to a growing inflow of Indian students and professionals. This trend not only addressed labour shortages but also served the strategic interests of destination countries by fostering long-term diplomatic ties and enhancing their global standing (Khadria, 2006). Indian students constituted the second-highest percentage of total international students in the US in 2019-20. The number of Indian students in the US was only 1400 in the year 1949-50, but it increased to 193124 in 2019-20 (ODR, 2021).

Immigration to the USA from various countries fluctuates based on a combination of economic policies, current economic conditions, war, demand for better employment, strong desires for a better standard of living and immigration policies followed by the US in various periods. Economic policies, including regulations on labour markets and trade agreements, can directly impact job availability and wages, influencing individuals' decisions to migrate. During times of economic instability or conflict, such as during wars or economic recessions, people may seek opportunities abroad to escape hardship and secure better prospects for themselves and their families. Additionally, individuals with a strong desire for personal and professional advancement may be more inclined to migrate. However, the ability to migrate can be shaped significantly by US immigration policies, which dictate entry requirements, visa availability and pathways to legal residency or citizenship. Recent trends, such as those during the Trump administration, have seen shifts towards stricter immigration enforcement, including attempts to tighten visa

regulations and limit legal immigration pathways. These policies may create challenges for immigrants, including those from India, seeking to enter or remain in the United States, impacting the accessibility of opportunities and potentially influencing migration decisions (Kerr, 2018).

When discussing human mobility, the terms migration and diaspora are frequently used, yet they refer to various kinds of movement and settlement patterns. Diaspora means the dispersion of a group of people from their original country to other regions of the world, while migration is the movement of people from one place to another (Vertovec, 2007 & Lal, 2012). A study by Cohen (2008) examines the distinctions between migration and diaspora. The paper makes the case that although diaspora refers to the scattering of a group or community, migration refers to the movement of individuals. Diaspora communities are distinguished by a sense of relationship with their native land, which is frequently maintained through cultural customs and activities. Another study (Castles et al., 2014) also made a distinction between migration and diaspora. Migration refers to the movement of people from one place to another, often intending to settle in a new location. It can be temporary or permanent and can occur for various reasons such as economic opportunities, political instability, or seeking protection from conflict or persecution. Migration can be internal (within a country) or international (between countries). Diaspora refers to a scattered population with a common origin in a particular geographic area or cultural group, who have dispersed and settled in other parts of the world. Unlike migration, diaspora emphasises the dispersion and the sense of shared identity or cultural heritage among the dispersed population. Diasporas often maintain connections with their homeland or with other members of the diaspora community, and they may contribute to the development of both their host countries and their countries of origin through various means such as remittances, philanthropy and cultural exchange.

Labour migration from Mexico to the United States serves as an illustration of migration. Numerous Mexicans have migrated to the US in pursuit of employment possibilities; they frequently take on low-paying positions in the

agriculture, construction and other sectors. This migration is typically temporary, with migrants frequently returning to their place of origin after a while (Massey, 1990). The Jewish diaspora, in contrast, refers to the centuries-long dispersion of Jews from their ancestral homeland in the Middle East to several locations throughout the globe. As a result of the Jewish diaspora, discrete Jewish communities have emerged in many nations, each with its distinctive customs and practices (Goldstein, 2014). Hence, the terms migration and diaspora relate to two separate categories of human mobility and settlement patterns. Understanding the distinctions between these ideas can help us better comprehend how people relocate and establish themselves around the world.

According to the United Nations, the Indian diaspora, which is currently the biggest in the world, will have a considerable international presence and a population of about 18 million people by 2020. With 12.7 million foreign residents, the Russian Federation was the only country with more foreign migrants than India (6.7 million) in 1990 (UN, 2017). The involvement of the Indian diaspora in philanthropy is pivotal for India's development, as successive generations of emigrants have significantly contributed to the country's progress and the betterment of its people (Rajan et al., 2023). When comes to the state level, Kerala had significant emigration (2.1 million in 2018) and emigration is thought to be the backbone of Kerala's economy (Rajan & Zachariah, 2018). Early emigrants from the state included several people who had to flee their native place due to difficult conditions such as extreme poverty and unemployment. These early migration patterns were characterised by low levels of ability, skill and education (Mathew & Nair, 1978; Prakash, 1978; Nair, 1983). History tells us that few people were sent as indentured servants or as slaves to the various British colonies (Thandi, 2008; Chanda & Ghosh, 2012). These migration generations contributed significantly to the region of origin's human and material resources through remittances. Compared to other Indian states, this allowed the natives to live in relative comfort (Ballard, 1983; Prakash, 1998; Zachariah & Rajan, 2004; Chanda & Ghosh, 2012; United Nations, 2011). According to recent studies, the benefits of earlier migration generations encouraged the present migration generation to migrate abroad in search

of better opportunities with higher skills, aspirations and dreams (Zachariah & Rajan, 2016; Parida & Raman, 2018). Kerala has historically relied heavily on remittances from abroad as a source of income (Parida et al., 2015; Rajan, 2014; Upadhyaya & Rutten, 2012). The breakdown of remittances by different states shows that states like Kerala, Maharashtra, Karnataka, and Tamil Nadu received about 58.7% of the total inward remittances (2016-2017). Kerala received 19% of all remittances during that period (RBI, 2018).

1.2. Research Problem.

Numerous studies have investigated the Gulf migration patterns and their impact on Kerala in various aspects (Sreevastava & Sasikumar, 2003; Zachariah & Rajan, 2004; Prakash, 1998; Rajan & Zachariah-2018). The emigration to the United States demands a separate lens due to the differing skill profiles of the migrants. This research recognises the need for a thorough understanding of the socio-economic aspects of skilled emigration from Kerala. It aims to explore the factors influencing migration from Kerala to the US, economic benefits and changes in the standard of living of migrant households compared to non-migrant households in Kerala, through a positive spillover effect.

The socio-economic dynamics of emigration from Kerala to the United States represent a unique migration pattern compared to migration to the Gulf region. Existing literature has focused on the various socio-economic aspects of migration to the Gulf, particularly examining the factors influencing migration, trends in migration, the impact of migration on the place of origin and the problems faced by family members left behind. However, migration to the United States is characterised by a predominantly skilled emigrant population.

As per the 2018 Kerala Migration Survey (KMS), the Gulf region, including the UAE, Saudi Arabia, Oman, Kuwait, Bahrain and Qatar, emerged as the primary destination for Keralites seeking employment opportunities abroad. In 2018, the UAE retained its position as the leading destination with 39.1% of emigrants choosing this Gulf country. The percentages for Saudi Arabia, Oman, Kuwait, Bahrain and Qatar also indicate substantial migration to these nations, although there

were fluctuations over the years. This migration pattern to the Gulf nations as a favored destination for Kerala's emigrants highlights the historical ties, economic opportunities and cultural connections that have shaped migration trends in the region (Rajan & Zachariah, 2018).

Interestingly, when considering countries other than the Middle East, the available data shows that emigration to the United States is comparatively high, constituting 2.2% of the total in 2018 (Rajan & Zachariah, 2018). This suggests a notable preference for the USA among Keralites seeking opportunities in regions beyond the Gulf countries. While the percentages are modest in comparison to the Gulf destinations, the data indicates a distinct trend of Keralites opting for the United States as a destination for emigration. This could be attributed to factors such as educational opportunities, employment prospects in diverse sectors and the adoption of a Western lifestyle (Rajan & Zachariah, 2018). Therefore the study about emigration from Kerala to the US is crucial. Examining emigration to the USA, unfolding the inner dynamics and rationalising the nuances elicited using suitable theoretical underpinnings to explain the underlying factors is a less ventured arena. Thus, this research is a scientific attempt to investigate the characteristics of emigrants from Kerala to the United States, different endowments influencing emigration from Kerala to the US and the impact of skilled emigration from Kerala to the United States on migrant households. This study further examines the phenomena of brain drain by analysing the accelerators and brake pedal of the Indian economy in the context of emigration.

1.3. Significance of the Study.

The desire for improved living conditions and economic opportunities both inside and outside of the region continues to be one of the key causes of migration throughout the world (World Bank, 2005). Migrants crossing the national borders of their country have various purposes, especially seeking better economic prospects and educational attainment. Foreign migration has multiple impacts on the social, political, economic and demographic scenario (Kraly & Gnanasekaran, 1987). According to the 2022 Global Migration Report (GMR), there will be 281 million

international migrant workers worldwide in 2020 (3.6% of the overall population). Both the countries of origin and the countries of destination may benefit economically from migration (Sasikumar & Hussain, 2008). Because there is a chance that a chain of growth begins with individuals and progresses through homes, communities and finally nations (IOM, 2014). Remittances play a key role in home countries, promoting economic progress and reducing poverty. Migrant workers also help host countries by filling gaps in the labour market. (Adams & Page, 2005; Yang and Martinez, 2006; Jongwanich, 2007; Wadood & Hossain, 2015).

The emigration of individuals from Kerala to the United States has become a prominent phenomenon with significant socio-economic implications. Understanding the factors and consequences of this migration pattern is of foremost importance. From a macro perspective (Indian context) this study explores the impact of GDP growth, human capital development and population density in India on migration patterns. This helps us to know the magnitude of the phenomena of brain drain. In the Kerala context, the study offers how education, religion, social networks, gender and asset holding influence migration. This study further explores the impact of migration on migrant households through the receipt of foreign remittances, as these remittances play a vital role in strengthening Kerala's economy, increasing household income and improving living standards (Kannan & Hari, 2002). By examining the socio-economic aspects of emigration, it is possible to accumulate ideas about the determinants of migration, the magnitude of remittances and its impact on various sectors, such as possession of assets and overall standard of living of the migrant households (annual consumption expenditure). Understanding these dynamics is crucial for ensuring the well-being of individuals and communities involved in the migration process. Although the migration of skilled workers constitutes a form of brain drain, it can contribute positively to household welfare and economic prosperity through a spillover effect. Migration also yields terms like brain gain and brain waste. The former implies benefits accrued by the country of origin through remittances, skill and knowledge transfer, while the latter refers to the underutilisation of skills by emigrants in the destination countries. Brain gain can considerably boost the economy of the

homeland by providing much-needed foreign remittances and fostering development through the transfer of expertise. On the other hand, brain waste represents a loss of potential for the migrants, who may not fully utilise their skills and abilities in the destination countries.

This research aims to address existing gaps in the current literature on the migration patterns from Kerala, contributing to academic understanding. It involves a comparative study between migrant households and non-migrant households. The study seeks to explore the socio-economic dynamics of skilled emigration from Kerala to the USA by examining the characteristics of both groups, identifying factors influencing emigration and assessing the economic impact of emigration on migrant households in Kerala. The study might provide policymakers with essential insights for making crucial decisions on this matter.

1.4. Research Gap.

Over the past few decades, emigration from Kerala to the United States has become a substantial phenomenon. Most of the research has addressed the reasons for this emigration, the impact of migration and remittances on the economy ((Kannan & Hari, 2002), return migration (Zachariah & Rajan, 2011) and the influence of migration on the psychological well-being of the left behind parents (Rajasenan et al., 2016). All these studies were exclusively focused on migration to the Gulf region. However, emigration from Kerala to the Gulf and the USA differ in many aspects. Given these differences, it is crucial to investigate emigration from Kerala to the US and its implications. Emigration from Kerala to the US, its determinants and the impact on migrant households have received less attention. When conducting a socio-economic analysis of emigration from Kerala to the United States of America, it is essential to focus on the impacts of emigration on migrant households compared to non-migrant households in Kerala. There is a significant research gap in this area, particularly regarding factors influencing emigration from Kerala to the US, and how emigration to the US impacts asset holding and living standards among migrant households in Kerala compared to non-migrant households.

1.5. Research Questions.

This study aims to explore the factors that influence emigration from Kerala to the USA. The study also analyses the socio-economic characteristics of both migrants and non-migrants from Kerala. Further, the study focuses on the impact of emigration on migrant households. Moreover, it also compares the experiences and outcomes of migrants with non-migrants. This examination gave rise to a set of research questions as follows.

1. What are the socio-economic characteristics of individuals who have migrated from Kerala to the US and how do they differ from non-migrants?
2. What are the trends of emigration from India to the US and its major determinants?
3. How do economic, social, educational and other factors influence the process of emigration from Kerala to the US?
4. How does emigration influence household dynamics, including economic well-being and the standard of living?

1.6. Objectives of the Study:

The specific objectives of the study are as follows.

1. To analyse the Socio-Economic Characteristics of both migrants and non-migrants.
2. To identify the accelerators and brake pedal of the Indian economy in the context of migration.
3. To evaluate the endowments and capabilities that help to respond to the factors contributing to migration from Kerala to the US.
4. To analyse the impact of emigration on migrant households.

1.7. Hypotheses.

1. There is no improvement in the asset holdings of migrant households due to emigration.
2. There is no improvement in the standard of living of migrant households due to emigration.

3. There is no difference in the standard of living among different religious communities within the migrant households.

1.8. Data and Methodology.

The study involves both analytical and descriptive analysis by using both primary and secondary data. The primary data were collected using a structured schedule from 358 households belonging to Pathanamthitta and Kottayam districts. The sample includes both migrant and non-migrant households. Secondary data were obtained from various publications, reports and related website resources. The first, third and fourth objectives are based on primary data, while the second objective has been analysed using secondary data.

A survey was conducted in 2023 to acquire primary data by using a pre-structured schedule. The different blocks of the interview schedule that was reviewed were as follows: basic information, household member's information, household details, possession of land holding, asset and consumer durables, details of income, loan details, consumer spending information, savings and investment information, the information about the emigrants and existence of migration networks are included. To identify the sample household, general information was gathered, including the household name, district, town/taluk, village and informant's name. Data on each household member's relationship to the head, sex, age, marital status, level of education and employment position were gathered under the heading 'details of members in the home'. The data gathered under 'household details' included ration cards, income, home details, land ownership, possession of assets, vehicles, consumer durables, etc... Under 'finance', information on loans and other liabilities was provided. Details of expenditures are provided under household consumer spending. Age, employment, citizenship status, monthly income, monthly remittances and the purpose of migration are provided under the section 'details of emigrants'.

1.8.1. Sources of Secondary Data.

The present study used several secondary data sources. The main sources of secondary data are World Bank data (2020), Penn World Data, World Population Prospects, US Census Bureau (2010 & 2019), American Community Survey (2010 & 2019), World Development Indicators (World Bank), OECD data source, Data

from EPW research foundation, Kerala Migration Survey (KMS-2018). These data sources have been used for empirical analysis. OECD data source, US Census Bureau and American Community Survey offer data on emigration from India to the US from 1995 to 2019. World Bank (World Development Indicators) provides the annual data on Gross Domestic Product (US \$). Penn World Data gives data on Human Capital for various years and World Population Prospects delivers data on population density.

1.8.2. Sample Design and Selection of Sample.

The population of the study is the total number of households selected from the two districts (Pathanamthitta and Kottayam) of the Kerala Migration Survey (KMS), 2018, conducted by the Centre for Development Studies (CDS), Trivandrum. The total number of households selected for the Kerala Migration Survey from Pathanamthitta and Kottayam are 600 and 960 respectively. The present study considers this as the population and draws samples from it. Thus, it is a kind of sampling where samples will be collected from a larger dataset (already collected large samples). In research, this kind of sampling efficiently utilises resources and reduces time and error in data collection (Brandt et al.,2021).

The two districts were chosen (Pathanamthitta and Kottayam) as they have the largest US emigrants compared to other districts (Rajan & Zachariah, 2018). Several factors contribute to the high emigration rates from Pathanamthitta and Kottayam. Historically, these districts have had better access to education and higher literacy rates, which facilitate the pursuit of opportunities abroad. Additionally, there is a strong tradition of migration within these communities, with established networks that ease the transition for new emigrants. Since Pathanamthitta and Kottayam have substantial Christian populations (KMS, 2018), the emigration trend of Christian communities to Western nations is notably higher than other religious communities. The high emigration rates among Christians in these districts can be attributed to several factors. Historical ties to Western missionaries have provided Christians with educational and linguistic advantages through mission-run institutions. Additionally, Christians from these districts have acquired specific education and skills that are highly demanded by countries like the US and other developed European nations. The education and skills acquired by the people from

these regions are closely aligned with the established diaspora networks, hence it significantly promotes the higher emigration rates among Christians from these regions.

The researcher took into account the socio-economic characteristics of both migrant and non-migrant households. The analysis considered age, sex, marital status, education, employment and religion as social and demographic factors. An examination was also conducted to determine the inequality in the living standards and asset possession between US migrant households and non-migrant households. Ashwani Saith has presented a methodological approach that examines the phenomena of migration from a macroeconomic viewpoint, allowing for the identification and assessment of the effects on the economy and society at large (Saith 1989). Saith's strategy is more thorough and covers the majority of the macroeconomic impacts' components (Prakash, 2008). The total number of samples used for this study is 358 and the sample size is calculated by using Cochran's Formula (Cochran, 1977).

$$\text{Infinite Population: } n = \frac{z^2 * \hat{p}(1-\hat{p})}{e^2}$$

$$\text{Finite Population: } n' = \frac{n}{1 + \frac{z^2 * \hat{p}(1-\hat{p})}{e^2 N}}$$

Where n= Sample size for an infinite population and n'=Sample size for a finite population

Z = Z value (1.96 at 95% confidence interval)

\hat{p} = Population proportion (From the base study)

N = Population size

e = Error Rate (5%)

The population proportion of Pathanamthitta and Kottayam used in the base study (Kerala Migration Survey, 2018) are 0.30 and 0.13 respectively. So the sample size of Pathanamthitta for a finite population size of 600 households is 210. Using the same calculation method, the sample size for Kottayam, with a finite population

of 960 households, is 274. Thus the total number of samples used for this study is 358 and it consists of 143 migrant households and 215 non-migrant households.

Table 1.1
Samples Selected for the Primary Survey, 2023.

Districts	No.of Sample HH	US Migrant HH	Non-Migrant HH
Pathanamthitta	210 (42%)	88 (58%)	122
Kottayam	148 (37%)	55 (63%)	93
Total	358	143	215

Source: Primary Survey, 2023

This study is based on the Kerala Migration Survey (KMS), 2018 undertaken by the Centre for Development Studies, Thiruvananthapuram, Kerala. A sample of 15000 families from all 14 districts of Kerala was used for the KMS, 2018. A multistage stratified random sampling method was used to choose the 15000 households. The number of sample households taken from the Pathanamthitta and Kottayam districts for KMS 2018 were 600 and 960 respectively. This sample households consist of both migrant and non-migrant households. In the Pathanamthitta district, out of 600 households, 42% are migrant households and the remaining 58% are non-migrant households. Similarly, in Kottayam district, out of 960 sample households, 37% are migrant households and 63% are non-migrant households. In this study, the same percentages are used to determine the number of US migrant and non-migrant households. A primary survey was conducted in 2023 to investigate the emigration to the US, its determinants and the change in quality of life brought by migration at the household level.

The number of sample households taken from Pathanamthitta for this study is 210 and from Kottayam district is 148. This sample households were further divided into two as US migrant households and non-migrant households. This division is based on the percentage of migrant households and non-migrant households from each district (KMS,2018). Thus the number of US migrant households from Pathanamthitta district is 88 and non-migrant households are 122. In the same manner, the number of US migrant households from Kottayam district is

55 and non-migrant households are 93. The details of migrant and non-migrant households were derived from a baseline study conducted by the Centre for Development Studies (CDS), with samples randomly chosen from the provided list.

Table 1.2
Samples from Each Taluks of Pathanamthitta and Kottayam.

Districts	Taluks	Number of HH	US Migrant HH	Non-Migrant HH
Pathanamthitta	Thiruvalla	38 (18 Per cent)	16	22
	Mallappally	23 (11 Per cent)	10	13
	Ranni	34 (16 Per cent)	14	20
	Kozhencherry	61 (29 Per cent)	25	36
	Adoor	54 (26 Per cent)	23	31
Total		210	88	122
Kottayam	Meenachil	30 (20 Per cent)	11	19
	Vaikom	24 (16 Per cent)	9	15
	Kottayam	47 (32 Per cent)	17	30
	Changanassery	26 (18 Per cent)	10	16
	Kanjirappally	21 (14 Per cent)	8	13
Total		148	55	93
Grant Total		358	143	215

Source: Primary Survey, 2023

Table 1.2 shows the distribution of samples across different taluks in Pathanamthitta and Kottayam. Kerala Migration Survey 2018 collected data from five taluks of Pathanamthitta and five taluks of Kottayam districts. Migrant households and non-migrant households in each taluk make up its strata. In the current study, there are ten taluks, resulting in a total of 20 strata. In a district, the distribution of sample households across different taluks is proportional to the number of samples selected for KMS 2018 from each taluks (Proportional

sampling). The migrant stratum includes households where at least one member has migrated to the USA. It includes the selected taluks from Pathanamthitta and Kottayam districts where migration to the US has occurred. Similarly, the non-migrant stratum comprises households where there is no history of migration to the USA. It includes households in the same selected taluks from Pathanamthitta and Kottayam districts. To ensure representativeness, a multistage sampling technique was utilised to select districts, followed by the selection of taluks within each district. This was followed by a stratified sampling approach, separating the heterogeneous population into homogenous migrants and non-migrant groups. Finally, a random sampling method was utilised to procure samples from both migrant and non-migrant groups for comprehensive analysis.

Pathanamthitta and Kottayam districts are presented with a breakdown of households across various taluks. To determine the number of US migrant and non-migrant households from all these taluks, the same percentages used to find US migrant and non-migrant households in both Pathanamthitta and Kottayam (as shown in Table 1.1) are applied. In Thiruvalla, there are 38 households with 42% classified as Migrant households (16) and the remaining 58% as Non-Migrant households (22). Similarly, Mallappally has 23 households consisting of 10 Migrant households and 13 Non-Migrant households. Ranni has 34 households and is divided into 14 Migrant households and 20 Non-Migrant households. Kozhencherry reports 61 households with 25 Migrant households and 36 Non-Migrant households. Likewise, Adoor has 54 households, it consists of 23 Migrant households and 31 Non-Migrant households.

Turning to Kottayam District, Meenachil exhibits 30 households with 37% being Migrant households (11) and 63% Non-Migrant households (19). Vaikom records 24 households comprising 9 Migrant households and 15 Non-Migrant households. Kottayam itself comprises 47 households with 17 Migrant households and 30 Non-Migrant households. Changanassery consists of 26 households and is split into 10 Migrant households and 16 Non-Migrant households. Kanjirappally accounts for 21 households with 8 Migrant households and 13 Non-Migrant

households. In this study, the determination of the number of households from each taluk is grounded in the methodology employed by the Kerala Migration Survey (KMS) 2018. Employing the methodology provided by the survey, the researcher adopted the same approach by selecting a specific percentage of households from each taluk in both the Pathanamthitta and Kottayam districts. This method aligns with the KMS 2018, ensuring consistency and comparability in the calculation of household numbers across different regions within the surveyed districts.

This study considers four groups: migrants, non-migrants, migrant households and non-migrant households. Migrants are individuals who have relocated from Kerala to the United States and are currently residing and working there. Non-migrants consist of representative individuals (in some cases the informants themselves) from families who have not migrated. Migrant households, on the other hand, refer to families or households in Kerala from which individuals have migrated to the United States, while non-migrant households are families or households in Kerala whose members have not migrated to the United States. A household as defined by the National Sample Survey Office (NSSO) involves ‘a group of individuals residing together and sharing meals from a common kitchen.’

1.8.3. Statistical Tools and Econometric Models Used.

Using a detailed survey schedule, information was gathered on various socio-economic characteristics of both migrant and non-migrant groups, factors contributing to emigration from Kerala to the USA, asset holdings and annual consumption expenditure. The study employed both analytical and descriptive methods, utilising appropriate statistical tools such as the Arithmetic Mean, Median, Standard Deviation, Skewness, Kurtosis, Jarque-Bera test, Kolmogorov-Smirnov test, Wilcoxon signed rank test, Kruskal-Wallis test, Mann-Whitney U test, Durbin-Watson test, ARDL model and Logistic Regression model.

1.8.4. Validation for the Analysis of the First Objective.

The first objective of this study is to conduct a descriptive analysis of the characteristics of migrants and non-migrants using primary data. The first part of

this objective examines the socio-economic characteristics of migrants, while the second part focuses on conducting a similar analysis among non-migrants. Some variables like age, sex, religion, marital status, education, occupation, nature of citizenship and location are used to examine the characteristics of these two groups. Out of the eight variables, the first six variables are common to both migrants and non-migrants, while the last two were exclusively used to examine the characteristics of migrants alone. Frequency distribution is used to determine the occurrence of specific numbers in the dataset, while cross-tabulation is utilised to analyse relationships between different variables.

1.8.5. Validation for the Analysis of the Second Objective.

The second objective of this study is to comprehensively examine the macroeconomic determinants or factors that act as accelerators and brake pedal influencing emigration from India to the USA. The theoretical background of this objective is the brain drain theory. This objective is analysed using secondary data collected from various sources and the Auto Regressive Distributed Lag (ARDL) model is also utilised to check the cointegration between dependent and independent variables. Thus an econometric model is constructed where the dependent variable is emigration from India to the USA (*EMIUS*) and the independent variables are GDP growth of India (*GDP*), human capital formation in India (*HC*) and population density of India (*DP*). The econometric model employed in this analysis is represented by Equation (1)

$$EMIUS_t = \beta_0 + \beta_1 GDP_t + \beta_2 HC_t + \beta_3 DP_t + \mu_t \quad (1)$$

The model for estimating emigration to the United States (*EMIUS*) in different periods is defined by key variables, where *EMIUS* represents emigration, *GDP* denotes the growth of India's Gross Domestic Product, *HC* measures human capital formation, *DP* signifies population density and μ accounts for the error term. The Auto Regressive Distributed Lag (ARDL) approach is chosen for estimating the model because this method accommodates lags of both dependent and independent variables and resolves endogeneity issues without pre-testing for unit root problems.

Similarly, the long-run relationship among variables is evaluated using the Unrestricted Error Correction Model (UECM), as depicted in Equation 2.

$$\begin{aligned} \Delta LNEMIUS_t = & \theta_1 + \theta_2 LNEMIUS_{t-1} + \theta_3 LNGDP_{t-1} + \theta_4 LNHC_{t-1} + \\ & \theta_5 LNDP_{t-1} + \sum_{i=1}^p \alpha_{2i} \Delta LNEMIUS_{t-i} + \sum_{i=0}^m \alpha_{3i} \Delta LNGDP_{t-i} + \\ & \sum_{i=0}^n \alpha_{4i} \Delta LNHC_{t-i} + \sum_{i=0}^k \alpha_{5i} \Delta LNDP_{t-i} + \varepsilon_{1t} \end{aligned} \quad (2)$$

Here, ε_{1t} symbolises the error term by satisfying the normal distribution with constant variance and zero mean. Further, the lag operator and the constant are represented by using Δ and θ_1 , respectively. The long-run coefficient of the independent variable on the dependent variable is outlined from θ_2 to θ_5 . However, the long-run relationship among the series can be established by using the F-test. In this line, a hypothesis test, i.e., $H_0 : \theta_2 = \theta_3 = \theta_4 = \theta_5 = 0$ vs $H_1 : \theta_2 \neq \theta_3 \neq \theta_4 \neq \theta_5 \neq 0$ has been conducted. A set of two critical values has been used for comparing the estimated F-statistics, in which the first difference is denoted by I (1) or upper bound and the level signifies I (0) or lower bound (Pesaran et al., 2001). Based on this, the alternative hypothesis is accepted, or the null hypothesis is rejected if the upper bound value is below the analysed value of the F-statistics. Similarly, the rejection of the alternative hypothesis happens when the analysed F-statistics are below the lower bound. In the same test, the inclusive results would be possible when the F-statistics fall in between upper and lower bounds.

The Error Correction Model is also used and is derived from the ARDL model by combining short-term adjustments with long-term equilibrium and is represented in Equation 3.

$$\begin{aligned} \Delta LNEMIUS_t = & \theta_1 + \sum_{i=1}^p \alpha_{2i} \Delta LNEMIUS_{t-i} + \sum_{i=0}^m \alpha_{3i} \Delta LNGDP_{t-i} + \\ & \sum_{i=0}^n \alpha_{4i} \Delta LNHC_{t-i} + \sum_{i=0}^k \alpha_{5i} \Delta LNDP_{t-i} + \gamma_1 ECM_t + \varepsilon_{1t} \end{aligned} \quad (3)$$

Here, γ shows that in a short period, how the variables run to the long-run association. To confirm this, it is the hypothesis that there is a negative coefficient sign and less than 0.5% for the error correction term (ECT). Further, the cumulative sum (CUSUM) and the cumulative sum of squares (CUSUMQ) have been used for

measuring short-run stability along with heteroscedasticity, normality and correlation to confirm the model's goodness of fit.

1.8.6. Validation for the Analysis of the Third Objective.

The third objective of this study is to evaluate the endowments and capabilities that help to respond to the factors contributing to emigration from Kerala to the US. The theories used to validate this objective are network theory and A.K. Sen's theory of endowments and capabilities. The first part of the third objective displays a descriptive analysis of the relationship between emigration and different types of endowments. Here, endowments refer to the possession of anything that helps an individual to do tasks. Pull factors in the US serve as a major motivation behind the emigration of skilled workers from Kerala to the US. However, not everyone in the state of Kerala can migrate to the USA due to the absence of certain endowments. Thus, endowments play a vital role in shaping the migration probability of the people of Kerala. To facilitate the smooth functioning of the analysis, endowments are classified into individual endowments (human capital), family endowments (family capital) and social endowments (social capital). In addition to this, the role of gender in the migration process is also examined.

In the second part, logistic regression is employed to determine the relationship between the probability of migration and different endowments. The dependent variable used in this model is migration status and it is binary (migration and non-migration). The independent variables in this analysis are categorised into individual endowments, family endowments, social endowments and gender. The components of each endowment are age and education (Human capital or individual endowments), size of land holding (Family capital or family endowment), religion and social networks (Social capital or social endowments). Gender is also taken into account as a determinant of emigration. The variables like the status of migration (non-migrants-0, migrants-1), sex (female-0, male-1), religion (Christian-0, Non-Christian-1) and networks in the US (no network in the US-0, network in the US-1) - are presented as categorical variables. Similarly, the variables such as age, education and the size of land holdings are presented as continuous variables. The logic behind

the selection of such variables is that individual endowments capture personal characteristics that influence migration. Likewise, family endowments examine the impact of family resources on migration and the social endowments explore the role of social factors and networks in the migration process. The details of the logistic regression model are given as follows.

In research, one can predict the chance of occurrence of an event by using the logistic regression model, which fits data to a logistic curve. This case involves the use of many predictor variables, which can be either categorical or numerical. When using regression, logistic regression is the method employed if the response variable is binary. In this study, the dichotomous dependent variables are classified as Migrants (code-1) and non-migrants (code-0). The logit model assumes that the probability distribution of “ui” follows the logistic probability distribution, which may be expressed as follows.

$$P = \frac{1}{1 + e^{-z_i}}$$

Where P is the expected probability of the event, z is the linear function of the set of predicted variables.

$$z_i = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \dots + \beta_k x_k$$

The basic form of the Logistic function is

$$Li = \ln \left(\frac{P_i}{1 - P_i} \right) = Z_i = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + u_i$$

Here, the odds ratio is represented by $P_i / (1 - P_i)$. It says that the log of the odds ratio is linearly affected by the “ β s” and the “Xs.” According to Gujarati (2014), the logit model is sometimes referred to as ‘Li’, represents the logit model or the log of the odds ratio. The rationale behind the selection of the logistic regression model was the binary nature of the dependent variable (migration status). The selected independent variables cover individual, family and social endowments that are believed to influence migration. The logistic regression model was estimated

using a stepwise approach by introducing some endowments such as individual, family and social endowments.

In logistic regression analysis, the odds ratio is a statistical measure used to calculate the strength and direction of the relationship between two binary outcomes. Interpretation of the odds ratios involves understanding how a one-unit change in each independent variable affects the odds of migration. For instance, an odds ratio greater than 1 indicates a positive impact on migration odds.

1.8.7. Validation for the Analysis of the Fourth Objective.

The final objective of this study is to analyse the impact of emigration on migrant households. The theoretical background of this objective is the human capital theory of migration. The fundamental aim of this objective is to examine the economic impact of emigration from Kerala to the United States on migrant households, concentrating on the changes in asset holding compared to non-migrant households. Further, this objective assesses changes in the asset holding experienced by the migrant households during the post-migration compared to the pre-migration period using a comprehensive set of variables such as motor vehicles, electronic devices, land holdings etc... For this, respondents were asked to specify the assets they acquired after the migration of family members. To smoothen the analysis, total asset values were computed using their respective average market prices. The last part of this objective analyses the impact of emigration on the standard of living of migrant households. Since the asset values and annual consumption expenditure value (proxy of the standard of living) are not normally distributed, non-parametric tests such as the Mann-Whitney U test, Wilcoxon signed rank test and Kruskal Wallis tests were used. The analysis will be carried out in the following four sections.

1. An inter-analysis of the impact of emigration on the asset holding: Migrant Households vs Non-Migrant households.
2. Analysis of the impact of emigration on changes in asset holdings in the post-migration period: An intra-analysis.

3. An inter-analysis of the impact of emigration on the Standard of living: Migrant Households vs Non-Migrant Households.
4. Analysing the impact of emigration on the standard of living of different religious communities: An intra-analysis.

Firstly, the analysis of the impact of emigration on asset holdings helps us understand the disparities in asset accumulation between migrant and non-migrant households. It reveals the differences in asset accumulation by migrant households compared to non-migrant households following the migration of family members. This section employs asset value as a variable to compare the assets possessed by migrant households with those of non-migrant households.

The classic method for comparing the means of two independent groups is called the *two-sample Student's t-test*. Where μ_1 and μ_2 represent the two population means with σ_1 and σ_2 being the corresponding standard deviations. The intention is to test whether the $H_0: \mu_1 = \mu_2$ (the hypothesis that the population means are equal), against the alternative hypothesis $H_1: \mu_1 \neq \mu_2$. To get a curb over the probability of a type I error three assumptions are to be met:

- Random sampling
- Normality
- Equal variances. That is, $\sigma_1 = \sigma_2$, which is called the *homogeneity of variance* assumption.

When the assumptions of the t-test are violated, such as when observations are independent and not normally distributed, the Mann-Whitney U test emerges as the preferred alternative for comparing two groups. This non-parametric test involves ordering the data in each group from lowest to highest, ranking the values and assigning tied values with the average rank. The statistic U is then calculated from the summed ranks for each group. The Mann-Whitney test is suitable when data are not normally distributed and variances are heterogeneous, as noted by

McIntosh (2010) and Leon (1998). Major characteristics of the Mann-Whitney U test are

- a. Is distribution free
- b. Is based on ranked values
- c. Is used to compare two independent groups
- d. The value of U and the degrees of freedom should always be stated.

$$U_t = n_c n_t + \frac{n_t(n_t+1)}{2} - R_t$$

$$U_c = n_c n_t + \frac{n_c(n_c+1)}{2} - R_c$$

Where n_c and n_t represent the sample size for the control and treated groups, respectively. R_c and R_t denote the sum of ranks for the control and treated groups and U_c is the Mann-Whitney statistic for control groups while U_t is the Mann-Whitney statistic for treatment groups. The larger value between U_c and U_t serves as the significance level for comparing the two groups and is compared against critical values from the table.

Secondly, analysing the post-migration changes in the asset holdings of migrant households is crucial for understanding the changes that occurred during the post-migration period compared to the pre-migration period. This analysis aims to capture the economic changes experienced by migrant households following the migration of a family member to the United States. This section employs the value of the asset as a variable and compares the pre and post-migration asset values to assess the impact of migration, utilising the Wilcoxon rank-sum test for clarity and precision.

Wilcoxon rank-sum test is commonly used for the comparison of nonparametric paired data. Normally, these data are measured within certain limits on certain ranges. The test is also used when there is no variability (variance = 0) within one or more of the groups. The data in both groups are initially sorted and

listed in ascending order. Each number in the two groups is then assigned a rank value. Starting with the smallest number in either group, which is ranked as 1, each subsequent number is given a rank. In case of multiple occurrences of the same number, referred to as ‘ties,’ each instance receives the median rank for the entire group of equal values. For example, if the lowest number appears twice, both instances are assigned a rank of 1.5. Consequently, ranks 1 and 2 are used and the next highest number receives a rank of 3. If the lowest number appears three times, each is ranked as 2 and the subsequent number is assigned a rank of 4. Hence, each tied number receives a median rank. This procedure continues until all numbers are ranked. The ranks for each group (one for each column) are then totaled, resulting in the sum of ranks for each group under comparison. As a validation, we can compute the value:

$$\frac{(N)(N + 1)}{2}$$

Where N is the total number of data in both groups.

The result should be equal to the sum of ranks for both groups. The sum of rank values is compared to table values to determine the degree of significant differences. These tables contain upper and lower limit values, which vary based on the probability level. If the number of data points differs between the two groups ($N_1 \neq N_2$), then the smaller sum of ranks (corresponding to the smaller N) is compared to the table limits to determine the level of significance. Typically, this comparison concludes the assessment of the two groups and the degree of significant difference can be reported accordingly.

In the third section, the researcher focuses on analysing the impact of emigration from Kerala to the United States on the standard of living of migrant households compared to non-migrant households. Here, annual consumption expenditure is considered a proxy for the standard of living due to respondents’ sensitivity regarding disclosing actual income. The primary variable utilised in this section is the annual consumption expenditure of both migrant and non-migrant households. Subsequent analyses utilise the same variable to analyse variations in

the standard of living among different religious groups within the migratory community. To analyse variations in the standard of living of migrant households compared to non-migrant households, the Mann-Whitney U test is employed. This section also examines the impact of emigration on different religious groups within the migrant community, as the process of emigration is closely connected with various cultural, social, religious and economic factors. Hence, analysing the impact of emigration on different religious groups within migrant households is vital.

Initially, an analysis is carried out among three religious groups: Hindus, Christians, and Muslims to assess differences in the standard of living. Later, pairwise analyses are conducted among two groups, including Hindus vs Muslims, Christians vs Muslims and Hindus vs Christians. Since two groups are being compared at a time, the pairwise analysis of religious groups employs the Mann-Whitney U test. To assess the standard of living differences among three religious groups, a statistical test like the Kruskal-Wallis test is used (since there are more than two groups)

The Kruskal-Wallis test is a non-parametric test developed by Kruskal and Wallis in 1952 to determine whether samples originate from the same distribution. It serves as an expansion of the Mann-Whitney U test to incorporate more than two groups, as noted by Xia (2019). This test essentially extends the rank-sum test to three or more groups, particularly useful in situations where a distribution-free approach is necessary and testing if the distributions have the same median. The stepwise procedures of this test are listed below.

- a. Name the number of samples m (3, 4 ...).
- b. Name the sizes of the several samples $n_1, n_2 \dots n_m$; n is the total.
- c. Combine the data, keeping track of the sample from which each datum arose.
- d. Rank the data.
- e. Add up the ranks of the data from each sample separately.
- f. Name the sums $T_1, T_2 \dots T_m$.
- g. Calculate the Kruskal–Wallis H statistic.

All data are combined and ranked from smallest (1) to largest (N). Subsequently, the sums of ranks within each subgroup are totaled and the probability is computed. The statistic H is

$$H = \frac{12}{NN+1} \sum \frac{R_i^2}{n_i} - 3N+1, \text{ or } H = \frac{12}{NN+1} \sum n_i r_i^2 - 3N + 1$$

Where N is the total number, n_i is the number in the i th group and R_i is the total sum of ranks in the i th group in the equation $r_i^2 = \frac{\sum R_i^2}{n_i^2}$. The value of H is tested against the chi-square distribution for $k - 1$ degrees of freedom, where k is the number of groups.

1.9. Chapterisation.

The present study is structured in eight chapters.

1.9.1. Chapter 1: Introduction.

The first chapter of this research will provide an overview of migration, the research problem and the significance of the study. In addition to this, the research questions, objectives and hypotheses will be presented along with the methodology adopted for the research.

1.9.2. Chapter 2: Conceptual Issues and Empirical Studies.

The second chapter provides conceptual issues, theoretical understanding and empirical reviews on migration studies. Various theoretical frameworks used in this study to validate different objectives and the empirical studies conducted on the topic will be discussed in detail.

1.9.3. Chapter 3: Emigration to the US.

The third chapter will provide a background and contextual analysis of the global trends in migration, emigration from India to the USA and current trends. This chapter also focuses on the emigration from Kerala to the USA and its nature.

1.9.4. Chapter 4: Socio-Economic Characteristics of Migrants and Non-Migrants.

The fourth chapter analyses the socio-economic characteristics of migrants and non-migrants from Kerala to the US. Analysis was conducted by using cross-tabulation and frequency tables. The variables used to examine the characteristics of migrants are age, sex, marital status, education, occupation, religion, status of citizenship and location. Similarly, the variables used to examine the characteristics of non-migrants are age, sex, marital status, religion, education and occupation.

1.9.5. Chapter 5: Accelerators and Brake Pedal of Emigration to the USA.

The fifth chapter focuses on the analysis of the second objective of the research. This chapter explores the various macroeconomic determinants that act as accelerators and brake pedal of the Indian economy in the context of migration. This objective is analysed by using secondary data collected from various sources.

1.9.6. Chapter 6: Emigration from Kerala to the USA: The Endowments and Capabilities.

The sixth chapter examines how emigration from Kerala to the US is influenced by different endowments such as individual endowments, family endowments, social endowments and gender. Individual endowments comprise the education and age of the migrants. Family endowments comprise the size of land (asset) held by the family and social endowments consist of religion and social networks.

1.9.7. Chapter 7: Impact of Emigration.

The seventh chapter illustrates the impact of emigration on migrant households compared to non-migrant households. In the first section of the chapter, an analysis was conducted to examine how emigration affects asset ownership among migrant households. In the second phase, the impact of emigration on the standard of living (annual consumption expenditure) of the households was examined.

1.9.8. Chapter 8: Findings, Suggestions and Scope.

The final chapter presents the key findings of the research including the socio-economic characteristics of emigrants from Kerala to the US, the determinants of emigration from India to the USA, the influence of different endowments on emigration from Kerala to the USA and the impact of emigration on migrant households. This chapter also discusses the policy implications and scope for further research.

1.10. Limitations of the Study.

Like all social science research, this study also has its limitations. The findings rely on the information and opinions provided by respondents which have their constraints. The objectivity of the study is naturally limited by the extent to which respondents are willing to provide accurate information. While efforts have been made to gather authentic data, there remains the possibility that some facts may have been withheld by respondents. This study is further limited by the fact that it only considers two districts, namely Pathanamthitta and Kottayam. Further, the study focuses on limited factors to analyse the impact of migration on households.

The next chapter discusses concepts related to migration, as well as empirical and theoretical studies of migration.

CONCEPTUAL ISSUES AND EMPIRICAL STUDIES

-
- *Introduction.*
 - *Basic Terms.*
 - *Theoretical understanding.*
 - *Understanding Studies on Emigration: A Review.*
 - *Conclusion.*
-

2.1. Introduction.

Although humans have always been migratory, large-scale transnational migrations did not begin until the sixteenth century, during the period of European expansion. The settlement of the colonies necessitated the relocation of a large number of colonial subjects. As the British Empire expanded and the settlement of overseas colonies quickened in the eighteenth century, this strategy gained traction (UN, 2004). During this time, Europe's mercantile requirements drove migration, which centered on the establishment of large-scale sugar, cotton, coffee and tobacco plantations (Dyrness & Karkkainen, 2008). Because the plantation economy was labour-intensive, the insatiable desire for cheap labour became a driving force behind the mass migration of millions of people across the Atlantic slave trade.

Many current movements can be traced back to colonialism-related migration (Stalker, 1994). With the gradual abolition of the slave trade, new techniques for obtaining needed labour emerged. The coolie system entailed the transportation of labourers, often over vast distances, to undertake agricultural or infrastructure work at a destination under a variety of binding contract arrangements, all of which required the workers to work for the contractors for a set period (Potts, 1990). Several academics in many domains have evaluated the extent of migratory occurrences, most of which were involuntary during various periods. But one can't rely upon such figures as it's miles nearly impossible to ascertain, with any diploma of accuracy, the number of migrants at any factor in history, and such an enterprise is past the purview of the current study. The motive of this chapter is to study the means and a variety of ideas related to 'migration' and its theoretical underpinning, and additionally to discover the prevailing-day dynamics and measurement of worldwide migration.

Generally, the migration of human beings is influenced by Push and Pull factors. The push factors are those aspects of faraway places that make them appear enticing; the pull factors are those aspects of distant places that give one reason to be dissatisfied with one's current location (Dorigo & Tobler, 1983). Push factors are usually associated with poor living conditions, such as a lack of job prospects. Job

and other economic opportunities are common pull forces. Several non-economic factors contribute to the push-pull forces, sometimes supporting each other.

Famine, poverty, low wages, unemployment, overpopulation, high taxes, discrimination, religious persecution, civil war, violence, crime, compelled military service and social immobility are the key push factors in the home country that induce emigration. These driving forces, on the other hand, have little bearing on the place to which emigrants relocate in search of better prospects. Of course, the pull factors in the destination will determine this, which will be controlled by the cost of moving such as transportation costs, travel time and missed income during the move. High earnings, employment, property rights, personal freedom, economic freedom, law and order, peace, religious freedom, educational opportunity, social mobility, cheap taxes and family reunification are all strong pull factors (Bodvarsson & Berg, 2009).

The cost of moving hinders migration to distant regions, particularly among the poor. Although migration is motivated by a desire to improve one's living conditions, the poorest people are rarely the ones who migrate (Skeldon, 1997). This explains why, despite living in absolute poverty, residents in specific locations refuse to relocate to avoid the dangers of poverty. The majority of migrants are not among the poorest of the poor, but rather persons with some wealth (Usher, 2005). Rather than absolute poverty, the most fundamental driver of migration appears to be a certain amount of socioeconomic development paired with relative deprivation in the form of global inequality in development chances (Skeldon, 1997). Some analysts, on the other hand, believe the opposite is true. For example, 'it was predominantly the very poorest, the lowest 20%, who contributed to the tide of foreign migration to the Middle East' in rural Pakistan (Burki, 1984).

The operation of the push and pull forces will almost certainly result in migration, both domestic and international and the counter factors that obstruct people's mobility are either absent or minor. This statement implies the existence of a defined path, rather than a chaotic trail, along which the migration process occurs.

The information economy of today places a strong emphasis on highly qualified individuals. They make outstanding direct contributions, such as ground-breaking inventions. There has been a lot of interest in figuring out how human capital is distributed globally and how global migration trends further shift the playing field against poorer countries. The complex interplay between governments trying to manage these flows through legislation, people looking for their best options given the constraints placed on them and businesses and other employers competing for talent that is in short supply has resulted in the migratory patterns of today. The key fact, however, is clear: there are highly concentrated migration movements of high-skilled workers both within and beyond national boundaries (Ozden, 2017).

India as a developing country has a large pool of qualified labour resources but also struggles with unemployment. They were compelled to move abroad due to a lack of career opportunities and other issues. High-skilled immigrant concentrations in particular occupations have risen in many host countries. For instance, about 57% of scientists in Switzerland, 45% in Australia and 38% in the United States are immigrants. In 2010, there were more than 35% of current medical residents were foreign-born and 27% of all doctors and surgeons. Significant high-skilled immigrant populations can be found in California, Boston, New York City and Seattle. In scientific fields, these spatial concentrations are even more pronounced and are found everywhere (Ozden, 2017).

Migration from Kerala to other countries occurs frequently in modern Kerala society. The Middle East, Europe and North America are now comparable to the Keralites' own nations. Malayalis who migrated to other nations have contributed significantly to Kerala's growth. The 'Gulf Boom', or the movement of Keralites to countries in the Arabian Peninsula in pursuit of employment, began in the early 1970s and is still going strong today. The backbone of Kerala's economy is the money that these non-resident Indians (NRIs) send. As a result of the Gulf migration, the socioeconomic structure of Kerala has undergone various changes. Kerala migration can be classified into two main categories. The first group is the

Malayalis who moved to the Gulf nations in quest of employment. After a specified period, this group would return to Kerala. The second migration of Malayalis is to industrialised nations like North America, Europe and others in search of a higher standard of life and education. These people prefer to move to countries like Europe, the United States, Canada, Australia and New Zealand (Vivek, 2022).

2.2. Basic Terms.

1. Migration: - Movement of people from one place to another.
2. Internal Migration (Domestic):- Movement of people within the country, state, district, etc.
3. External migration (International):- Movement of people beyond their state boundary and stay in the host state for some minimum length of time. OR movement of people outside of their home country.
4. Voluntary migration: - If the movement of people is based on their free will and initiative, it is called voluntary migration.
5. Forced migration: - Movement of people from one place to another due to the strong pressure by the situation beyond the control of the migrant.
6. Seasonal migration: - Migration of people in each season in search of better conditions for themselves and their livestock.
7. Seasonal migrants:- People who work in another State for only a portion of the year due to the seasonal nature of the employment they conduct. People from less developed countries move to industrialised nations for settlement purposes to benefit from greater employment opportunities, prospects, and living conditions.
8. Contract migrants:- Individuals who work abroad under agreements that place restrictions on the length of their employment and the particular task they are allowed to perform. Upon acceptance, contract migrant workers are prohibited from changing occupations and are required to depart the nation

of employment at the end of their employment period, whether or not the work they perform continues.

9. Migrant household:- A household that has experienced any type of migration (internal or external) at any point is referred to as a migrant household. A Gulf migrant is someone who has moved to one of the six Gulf Cooperation Council (GCC) nations, which include the United Arab Emirates, Saudi Arabia, Kuwait, Qatar, Bahrain and Oman. People who have migrated to other regions of the nation or the world are referred to as other migrants. A household becomes a non-migrant household if no one moves from it to another one.
10. Return migration:- This refers to migrants who are compelled to return home because their employment has been terminated or canceled or for other reasons such as challenging working conditions, substandard living conditions etc... The total number of moves made for a certain migration interval that share a common area of origin and destination is referred to as a 'migration stream.'
11. Replacement migration:- It can be defined as an internal movement that occurs to counteract emigration from a specific locality. For example, emigration from Kerala to the Gulf has converted Kerala into a large-scale migration of workers from other parts of India.
12. Asylum seekers: - Those people who have left their home country as a political refugee and are looking for asylum in another.
13. Border management: - It is part of defense where the movement of terrorists, illegal tourists, and migrants are controlled.
14. Brain Drain: - Movement of talented, trained and skilled people from their home country to another country.
15. Brain gain (reverse brain drain):-Movement of talented and skilled people into the destination country.

16. **Brain Waste:-** It is a situation where an individual is employed in a job that requires a lower skill level than they possess.
17. **Country of origin/Homeland:** - In the context of emigration, country of origin means the country where someone comes from.
18. **Country of destination/Hostland:** - A country toward which a person or a group of persons move.
19. **Emigration:-** It is an act of moving from the country of origin to another destination.
20. **Emigrants:** - An emigrant is a person who is moving out of his country.
21. **Immigration:-** It is an act of moving into one country from another.
22. **Immigrants:-**An immigrant is an individual who comes into a country.
23. **Labour migration:-**Movement of an individual from one state to another or within their own country for employment purposes.
24. **Skilled migrants:-** Skilled migrants are those migrants who have special knowledge, skills, training and ability in their work.
25. **Remittance:** - The amount of money or gift sent by the emigrants to their home country.
26. **Social remittance:-** The transfer of ideas, skills, know-how and practices by an emigrant to their home country.
27. **Naturalisation:** - Granting nationality by a state to a non-national through an official act on the request of the individual concerned.
28. **Green card:** - A card issued by the US government that allows the non-US citizen to get permanent residence in the United States.
29. **Citizenship:** - A status given to a person that includes the status of freedom along with some responsibilities such as allegiance, taxation, etc.

30. **Human Capital:** - The concept of human capital acknowledges the non-tangible resources and characteristics (knowledge, skills and health) that enhance worker productivity and benefit the economy. These characteristics are inextricably linked to the individuals who receive or possess them.
31. **Population Density:** - It means the number of people living per square kilometer.
32. **Endowment:-** Anything that a person possesses in the form of wealth, education, social network etc...

2.3. Theoretical Understanding.

Early study of migration (Farr, 1876) noted that migration appeared to be devoid of any precise law or rationale. In retaliation, Ernst George Ravenstein proposed his laws of migration (Ravenstein, 1885; 1889). These migration rules, which are presented as generalisations, can be considered the forerunners of theoretical expositions on the topic. Since then, several economic and non-economic theoretical models have been developed in an attempt to explain the complexities of migration. Although there are numerous theoretical expositions as investigators from various social science disciplines enter the realm of theoretical formulation, economic explanations have dominated systematic scholarly thinking on migration. ‘The economic theory of migration tries to explain why people leave one country and move to another and live and work in another nation’ (Bodvarsson, 2009). The predecessor of such a theoretical framework that offers to reason on labour migration is a neoclassical economic theory.

2.3.1. The Human Capital Theory of Migration.

The human capital theory is based on the premise that individuals’ productive capacities are determined by their degrees of education, skill and physical capability. The human capital theory of migration (Sjaastad, 1962) views migration as an investment that implies current expenses in exchange for future rewards. Migrant evaluates advantages and disadvantages using their human capital, which is an essential component of personal wealth. ‘While he cannot normally sell

this wealth, as he could a machine or a farm that he owns, he may boost its future earning capacity by investing in schooling, on-the-job training and occupational and geographical mobility,' (Grubel & Scott, 1977).

According to the theory, each individual calculates the present value of expected proceeds from employment in various locations based on his skills. If the expected net proceeds from a particular region are higher, migrants will undoubtedly relocate there. Because future earnings from relocating have a significant impact on migration decisions, job progression chances are particularly crucial (Hercog, 2008). Furthermore, a country's attractiveness is influenced by its living conditions. Even if the salaries in the receiving country are not higher, immigration can occur if the living conditions in the receiving country appear to be very appealing (Massey et al., 1993). The incorporation of psychological costs due to separation from family and friends, as well as monetary and opportunity costs of moving, is a key component of this approach.

The fundamental contribution of the human capital method is that it emphasises the importance of individual heterogeneity in migration decisions, rather than only aggregate labour market characteristics such as income and unemployment differences (Bauer & Zimmermann, 1995). Youth and well-educated people, for example, will have a larger tendency to migrate. Factors such as distance and population densities were also thought to influence migration patterns (Skeldon, 1997). Because the expenses and risks related to mobility are predicted to rise with distance, the distance between the origin and destination is supposed to be a decisive variable. According to the human capital model, the likelihood of finding work in the destination country is determined by the migrants' skill levels and incentives to invest in destination-specific human capital (Bauer & Zimmermann, 1995).

The absolute dependence on human characteristics such as education, skill level and age, with no respect for the perceived or relative material riches of potential migrants, appears implausible as an explanation for migratory patterns. The relative economic status of the individuals who make up the prospective army of migrants should be considered in theoretical expositions aimed at calibrating the

commencement and continuation of international migration. The relative deprivation theory aims to explain migratory movements along this track by addressing this particular component.

2.3.2. The Network Theory of Migration.

Migrant networks are interpersonal networks that link migrants, former migrants and non-migrants in origin and destination locations through kinship, friendship and a similar community origin (Massey et al., 1998). Network effects are commonly reported to be one of the most important variables affecting migration at the micro level (Munshi, 2003). People can use their network connections to gain access to a variety of financial resources, including overseas jobs, high salaries and the capacity to save and send remittances. By giving financial money, remittances assist people in breaking the cycle of poverty. The desire to migrate does not lead to migration if there is inadequate money to cover the expenditures of shifting. Network effects may help to lessen this poverty limitation by remittances for travel and support at the destination (Hatton & Williamson, 2009).

In addition, migration facilitates the flow of knowledge from the point of origin to the point of destination, making it easier for subsequent migrants to travel (Lee, 1966). Individual movement to unknown locations looks implausible, given that migrants require some sort of destination information. The existence of a network of relatives and friends who have previously migrated to that specific country typically dictates the choice of destination location. Many historical and modern international migratory movements support the claim that ‘the majority of movers go along well-trodden roads that, even if they have not traveled them before, have been traversed previously by family members and acquaintances’ (Hugo, 1994). This means that establishing a migrant community in one area will raise the likelihood of future migration to that location (Appleyard, 1992).

2.3.3. Brain Drain Theory.

The concept of brain drain is associated with the Royal Society and originated in post-war Europe. The term was coined by individuals within the Royal

Society to explain the migration of highly skilled professionals to countries offering vibrant scientific and technological prospects, notably in North America (Cervantes & Guellec, 2002). This phenomenon raised concerns in the United Kingdom, symbolising a depletion of intellectual capital and innovative minds that could have otherwise contributed to the nation's scientific and economic advancement. The Royal Society's framing of the brain drain theory emphasises its focus on the scientific and technological dimensions of skilled migration during this historical period. Within the context of the United Kingdom, the term 'brain drain' also held significance, describing not only the outflow of skilled professionals from the UK but also the inflow of talent, particularly from India (Spring, 2009). This perspective suggests that the term included both the loss of skilled workers from the UK and the absorption of foreign professionals, especially from India.

2.3.4. Sen's Theory of Endowments and Capabilities.

Amartya Sen's capability approach, as articulated in seminal works such as *Poverty and Famines* (1982) *Commodities and Capabilities* (1985), *The Standard of Living* (1987) and *Development as Freedom* (1999), presents a unique perspective on human well-being and development. Sen's framework goes beyond traditional economic indicators like income to assess well-being based on individuals' endowments, capabilities and genuine opportunities and freedoms to pursue lives they value. Within Sen's model, well-being is evaluated in terms of the essential freedoms people possess to achieve valuable functioning, spanning from health and education to political engagement and economic prosperity. By focusing on the concepts of endowments and capabilities, Sen emphasises the importance of expanding individuals' choices and entitlements to promote development. His theory highlights that development should be evaluated by the enhancement of these endowments and capabilities, with the ultimate aim of enabling individuals to pursue and achieve their own life goals. Consequently, Sen's framework provides a comprehensive lens for examining how various endowments intersect and influence individuals' capabilities, underlining the significance of understanding the nature of resources and contextual factors in assessing well-being and development.

The present study employs four theoretical frameworks to support its research objectives. The second objective of this research utilises the brain drain theory. Similarly, the third objective incorporates network theory and A.K. Sen's theory of endowments and capabilities. The human capital theory of migration is used to validate the final objective of this study.

2.4. Understanding Studies on Emigration: A Review.

To get a deep idea about the conceptual framework, it is very much essential to get adequate and proper information on subject knowledge. So a sound background is a necessary one to conduct any research. The appropriate literature review helps us to find the research gap. Several studies have been conducted by different researchers on emigrants, their socio-economic impacts, trends, impacts on those left behind, etc. This study is an attempt to examine the socio-economic aspects of emigration from Kerala to the United States of America. Several migration theories exhibit the reasons why people migrate and whether it is voluntary or involuntary. Good economic conditions and better opportunities are the main reasons for voluntary migration. The flow of migration generally between economically backward regions to economically advanced regions.

Bhagwati (1976) in his article entitled 'Brain Drain' examined the emigration of highly skilled workers and its impact on the sending countries, especially on developing countries. He identified that the governments of developing countries spent a huge amount on the development of human capital. This expenditure becomes a burden since the educated, skilled and highly qualified workers are moving toward advanced countries (Bhagwati, 1976).

Prakash (1978) conducted the first in-depth analysis based on primary data on the effects of Gulf migration on the socioeconomic well-being of emigrant families. The required data was collected from 95 emigrant households in Chavakkad village of Thrissur district. The major findings of this study were, 1) there were around 136 migrants from the 95 sample families that went to the Middle East, 2) the encouragement and assistance from family and friends in the Middle East led to the chain migration from Chavakkad, 3) the bulk of the migrants worked

in low-skilled or unskilled occupational categories, including construction, military support and small company activities, 4) migrants often send between Rs. 200 and Rs. 1500 each month, 5) the family of the emigrants has been able to raise their level of living due to the remittances, 6) more than 90% of income was spent on real estate, buildings, and marriages, 7) unproductive use of overseas remittances has increased the cost of real estate, the cost of building supplies and the wages of construction workers (Prakash,1978).

According to the study by Nair (1983), the economically and socially backward Keralites were forced to relocate to the Gulf regions. In addition, the survey discovered that more than 50% of foreign money was used for personal expenditure. The significant quantity of overseas remittance income used for spending proves that the majority of emigrants were from low-income families. The survey also discovered an improvement in the emigrant family's possession of assets, including real estate, homes, jewelry made of gold and consumer goods (Nair, 1983).

Usha (1984) explored the experiences of return emigrants who had migrated from Kollam district. By surveying these returnees, the researcher identified a significant need for their rehabilitation. Her findings emphasised the importance of addressing the challenges faced by return emigrants to support their reintegration into society effectively (Usha, 1984).

Nair (1986) examined the advantages and disadvantages of emigration at the level of the household. The emigrant families' social and psychological strains were noted as significant negative consequences, whereas the key beneficial effects of migrating were attitudinal improvements (Nair, 1986).

Sandefur (1986) examined the involvement of White American Indians and intermarried Indian white couples' participation in interstate migration and the labour force. The findings of this study demonstrate that compared to the other two types of couples, endogenous American Indian couples are far less likely to move their state of residency. The three groups of couples do not differ in how interstate migration affects labour force participation. The author has covered the

consequences of the aforementioned impacts on federal Indian policy as well as the assimilation and internal colonial models of racial relations (Sandefur, 1986).

The Directorate of Economics and Statistics (DES, 1987) made an effort to assess the effect of Gulf remittances on migrant households and the state economy. According to the survey, the income of migrant homes was significantly higher than that of non-migrant and returning migrant households, showing that migration has raised household incomes. An analysis of the remittances' use patterns revealed that migrant households spent more than non-migrant households on things like food, clothing, education, fuel, lighting, travel, entertainment and medical costs. Additionally, the migrant households were mostly investing in the construction of homes, the acquisition of land and gold jewelry, among other non-productive activities (DES, 1987).

Findlay and Gould (1989) analysed two key factors influencing skilled migration abroad and highlighted the difficulties in understanding these mechanisms using secondary data sources that are readily available. They investigated the political ramifications and geographic effects of the change from settler to skilled migrant migration. A list of selected research issues about skilled international migration is offered in the last section of their study (Findlay & Gould, 1989).

Bindu (1992) investigated the emigration patterns, educational qualifications, and skill composition of emigrants. The study focused on two Panchayaths for detailed analysis: Koipram Panchayat in Thiruvalla Taluk and Elakamon Panchayat in Chirayinkeezhu Taluk. The research highlighted significant regional differences in education, occupation and prior migration experience among emigrants. The findings demonstrated that emigrants from Koipram possess higher educational qualifications, better occupational positions and more prior migration experience compared to those from Elakamon. This study underlines the importance of considering regional variations when analysing emigration trends and their socio-economic impacts (Bindu, 1992).

Gulathi (1993) examined the effects of male migration on women using primary data collected in the Trivandrum region with a high concentration of

migrants. She noticed that migration significantly increased the authority of the women left behind at home. She discovered that migration reduces women's isolation, boosts their mobility and exposes them to a wider network of institutions including banks, educational institutions, post offices and global communication patterns, giving them more self-assurance and responsibility (Gulathi, 1993).

Gordon & Molho (1995) examined the distinctive traits of the female labour market in the London Metropolitan area. The two sets of spatial constraints that were found were as follows: first, married women's residential location tended to depend on their ability to access male employment opportunities rather than female employment opportunities and second, unrestricted access to owner occupation tended to limit the residential mobility of single women (Gordon & Molho, 1995).

Prakash (1998) investigated the financial effects of Gulf migration on Kerala's economy. The study showed that Gulf migration had significantly altered the Kerala economy, particularly in terms of savings and investment, consumption, poverty, income distribution, the labour market and regional growth. Additionally, he noted that the Malabar region has a greater rate of migration, which has boosted the region's urbanisation and economic expansion through the flow of enormous remittances (Prakash, 1998).

The research conducted by Sekhar (1998) in two highly migrating villages - Kadappuram in Trichur district and Valavannur in Malappuram district shows that the emigration of men exposed the traditional village woman to an entirely new circumstance. He said that Kerala's traditionally conservative rural setting has been significantly impacted by the male exodus, which has resulted in a multiplicity of rural women's empowerment (Sekhar, 1998).

Nambiar (1998) has conducted an examination of the migration process and its results with references to return emigrants. According to the report, the majority of Gulf migrants were young, less educated and came from economically and socially disadvantaged households. The study also found that a sizable portion of emigrants were left out of the migration-related economic boom since they were

working in low-paying domestic jobs, service industries, and construction jobs (Nambiar, 1998).

According to Straubhaar (2000), when comparing EU (European Union) countries to the US, the EU countries lagged in this race concerning highly skilled human immigration. The EU nations' strict immigration laws and their universities' barriers to international students can be cited as causes of this situation. The USA enjoys a 'Brain Gain' that spurs growth as a result of several natural and man-made advantages (the sun, sea and sand, intimate linkages between business and universities, etc.) that draw highly skilled individuals from all over the world. Mobility in Europe is primarily intra-European and represents a 'Brain Exchange.' The development of an internal labour market and the Europeanisation of manufacturing are the main drivers of this. However, the EU lacks the power that is necessary to attract highly qualified foreign scientists and establish itself as a major hub for the production of research-intensive (service) goods (Straubhaar,2000).

Zachariah et al., (2001) did a study on the demographic effects of emigration from Kerala to the Gulf countries. The study pointed out that even though the Gulf wives suffer psychological pressure, loneliness and additional obligations, their husbands' migration has made them more capable home managers (Zachariah et al., 2001).

Zachariah & Rajan (2001) analyse the gender aspects of migration from Kerala, using data from a survey of 10,000 households. They highlight the significant impact on women left behind by migrating husbands, noting their preference for their husbands to work locally to avoid the psychological and social challenges of separation, such as reduced self-confidence and difficulties in a male-dominated society (Zachariah & Rajan, 2001).

Domingues et al., (2001) examined the dynamics of migrant flows and economic development in a developing nation. They contend that since employees are free to pick their workplace, some nationals can sensibly decide to return home after gaining some experience overseas, while others prefer to remain there

permanently. The study also discovered that labour mobility could benefit a developing nation's economic growth (Domingues et al., 2001).

Saxenian et al., (2002) examined the brain drain aspect of emigration from India to the US. Even though emigration is a form of brain drain, the sending country can reap some benefits such as enhanced skills, productivity and entrepreneurship. To them, emigration from India to the USA is no longer a one-way route. This study further found that the 'brain drain' from India has evolved into a 'brain circulation'. Moreover, due to cultural and personal reasons, a high proportion of Indian professional immigrants in Silicon Valley are willing to return to their home country (Saxenian et al., 2002).

Hunger Uwe (2002) published an article entitled *The Brain Gain Hypothesis: Third World Elites in Industrialised Countries and Socio-Economic Development in their Home Country*. This study examined the influence of skilled labour migration on the socio-economic growth of the country of origin. When compared to brain circulation, the recently proposed model of brain gain or brain reversal is a step ahead. According to the brain gain hypothesis, the migration of highly skilled workers is considered a potential resource for emerging countries. These migrants will return with high human, social and financial capital and the deployment of these resources will enhance the socio-economic situations of the home country (Hunger Uwe, 2002).

Devi (2002) investigated the impact of globalisation on gender relations in the case of software professionals moving around the world. The targeted group of this study was H-1B and H-4 visa holders. H-4 visa holders are usually highly skilled dependent wives who live normal lives and they want to be ideal mothers and to uphold Indian values and cultures even while they are living overseas. Similarly, the dependent wives of software professionals on H-1B visas rely mostly on their finances and they also uphold Indian cultural and social beliefs in the USA. This study further found that the number of emigrants from India to the US is increasing due to the phenomenon of globalisation (Devi, 2002).

Singh conducted research (2003) on *Brain Drain and Brain Gain? Return Migration of Indian Information Technology Professional*. The primary goal of this study was to determine the brain gain that India can expect from emigration to the US. The targeted group of this study was IT professionals who migrated to the United States from major cities of India like Bangalore and Hyderabad. He identified that there are two groups of return migrants, return professionals and return entrepreneurs. The former wants to return to the USA and the latter seeks to stay in India permanently. The study concluded that the Indian IT industry can make use of the experience, exposure and knowledge of advanced technology acquired by the emigrants for the development of the domestic IT industry (Singh, 2003).

Osella & Osella (2003) investigate the intersection of migration, masculinity and life-cycle stages among men in Kerala. The study identifies various male archetypes and how migration to the Gulf enhances their relationship with money and masculinity. It suggests that migration is integrated into broader identity projects, reflecting the evolving nature of masculinity concerning economic opportunities abroad (Osella & Osella, 2003).

Zachariah & Rajan (2004) conducted another study that looked at the employment, wages, and working conditions of Indian employees in the UAE. The nature of contract migration, the need for migrant labour, as well as the pay and working circumstances for returning emigrants, were also explored in the study. They discovered that since 1996, the demand for unskilled and semi-skilled labourers has been significantly reduced due to changes in the UAE government's immigration policies, the economic downturn and the completion of significant infrastructure projects (Zachariah & Rajan, 2004).

Desilver (2004) published an article entitled 'Five Facts about Indian Americans'. The major objective of this study was to find out the realities of Indian emigrants who are living in the USA. The study found that 87.2% of Indian Americans were born outside of India in the year 2010 and 56.2% of people obtained US citizenship. According to the ACS of 2013, the percentage of people with a graduate or professional degree (age 25 and up) was 40.6%. Another

noteworthy finding was that Indian Hindus made up 51% of the population, followed by Christians at 18% and Muslims at 10%. Indian Americans have a high annual average income when compared to Asian Americans. It has an impact on poverty levels as well. Indian Americans have a lower poverty rate of 9% than Asian Americans, who have a higher rate of 12% (Desilver, 2004).

Dicicco-Bloom (2004) explores the experiences of immigrant women nurses from Kerala working in the United States. Using in-depth interviews, the study highlights the challenges they face, such as balancing two cultures, experiencing racism and being marginalised as female nurses of color. These stories reveal ongoing inequities in the healthcare system and stress the need for a fairer and more effective environment for both healthcare providers and patients (Dicicco-Bloom, 2004).

Srivastava & Kumar (2005) discussed some of the core issues that surround both domestic and international labour migration. It examines current governmental and nongovernmental programs and analyses the general trend and character of labour migration (Srivastava & Kumar, 2005).

Nigel (2005) discusses the evolving stance of governments on immigration. Initially, hesitant, many governments have now embraced emigration for work, recognising its significant positive impact on foreign exchange gains and poverty alleviation. Nigel highlights how international migration has become a crucial factor in economic policy, with governments acknowledging the beneficial effects of remittances on reducing poverty in sending countries. (Nigel, 2005).

Ellerman's (2005) study, 'Labour Migration: A Developmental Path or a Low-Level Trap?' explores the impact of migration on the economic development of sending countries. He highlights that post-WWII, temporary labour migration was seen as a development strategy and while remittances have improved living standards and rival official development assistance, they do not ensure sustainable economic development or higher incomes without continued migration. Ellerman notes that genuinely temporary labour migration schemes hold some promise, but warns that semi-permanent migration patterns can trap sending countries into

continuously supplying labour for dirty, dangerous and difficult jobs in the Global North, ultimately hindering self-development in the Global South. (Ellerman, 2005).

Adams Jr. & John Page (2005) attempt to examine a variety of migration-related concerns while taking into account 71 developing countries. The findings demonstrate that remittances and foreign migration both greatly alleviate the severity of poverty in these nations. The empirical findings have demonstrated a negative connection between these two factors (Adams Jr & John Page, 2005).

Gupta (2005) examined the remittance trend in the post-globalisation age in her work 'Macroeconomic Determinants of Remittances: Evidence from India'. Her research revealed that since 1991, remittances to India have been expanding quickly, making it the top beneficiary of remittances in the developing world. This study examines the factors that affect remittances and how their development affects migrants' overall earnings (Gupta, 2005).

Desai & Banerji (2005) looked at the effects of husbands leaving their wives behind. Data from the 2005 Indian Human Development Survey was used to study it. They primarily concentrated on two aspects of women's lives: women's autonomy and control over their lives and women's participation in the work field. The findings indicated that while women who live in extended households do not experience these pressures or benefits, those who do face higher levels of responsibility and greater autonomy (Desai & Banerji, 2005).

Purkayastha (2005) presents a detailed examination of the cumulative disadvantages faced by Asian Indian women in the United States. Through the analysis of various data, the study highlights the compounded challenges arising from gendered and racialised immigration laws, as well as the intersection of workplace and household experiences. The paper argues for the necessity of a complex, intersectional model to fully understand and address the unique experiences and systemic obstacles encountered by these women. (Purkayastha, 2005).

Ruiz-Arranz & Giuliano (2005) investigated how remittances impact economic growth using a comprehensive dataset across many developing nations. They found that remittances play a crucial role in boosting investment in countries with less developed financial systems that struggle with capital access. As these financial systems improve, however, investments increasingly depend on domestic markets, leading remittances to be diverted to less economically productive purposes. This research underscores how remittances evolve within developing economies, influenced by the development of financial systems and investment strategies (Ruiz-Arranz & Giuliano, 2005).

Harris (2005) emphasises the pivotal role of remittances in numerous economies, highlighting their significant contribution to foreign exchange earnings. He proposes circulatory migration as a method for developing human capital in developing countries, presenting it as a sophisticated strategy to utilise migration for reducing global poverty. This viewpoint underscores the advantages of well-planned migration policies that target both economic growth and poverty alleviation on a global level (Harris, 2005).

Percot (2005) studies the aspirations of Kerala women nurses who seek more than just well-paid jobs abroad. They aim for a lifestyle that overcomes traditional gender limitations and enhances female agency and the nuclear family. The study shows how their migration to the Gulf over three decades has evolved strategically to take advantage of new opportunities in the West. This shift indicates the formation of a Kerala diaspora in the Gulf and highlights broader global changes in lifestyle choices and gender roles within this community (Percot, 2005).

Gupta (2005) examined the factors influencing remittances to India and concluded that their increase over time correlates with rising migration and total earnings of migrants. His analysis underscored the significance of variables such as workforce size, wage disparities and economic conditions in both sending and receiving nations in influencing remittance levels. Gupta observed that remittances tend to rise during economic downturns in India, suggesting a countercyclical trend. However, factors like political uncertainty, interest rate differentials, currency

exchange rates and oil prices showed minimal influence on remittance patterns (Gupta, 2005).

Pat (2005) in his study titled 'Black Spots' provided a detailed socio-economic analysis of Kerala, highlighting significantly higher per capita consumption expenditure in the state. His research emphasised Kerala's considerable gains from annual remittances by expatriates, which consistently bolstered consumer spending (Pat, 2005).

Khadria's (2006) study analyses the migration of both skilled and unskilled labour from India to Middle Eastern countries. The study highlights the trends and fluctuations in this migration pattern. Khadria concludes that the significant growth in India's foreign exchange reserves is largely attributable to the migration of people to the Middle East. This migration has had a substantial impact on India's economy, emphasising the critical role that remittances from this region play in bolstering the country's financial stability. This study shows the economic benefits of labour migration for India, particularly in terms of foreign exchange reserves. (Khadria, 2006).

Musetescu (2006) delves into migrant issues and human rights, expressing great dedication to his work in this area. He argues that temporary labour migration reflects political governance failures in both the destination and origin countries. The study underlines the complexities and challenges associated with temporary labour migration, suggesting that it is not merely an economic phenomenon but also a symptom of deeper political issues. (Musetescu, 2006).

Messina & Lahav (2006) estimated that approximately 175 million people, or about 3% of the world's population, now live in countries other than those in which they were born. Their study highlights that with the advent of globalisation, worldwide migration saw a significant increase during the 1990s. This analysis emphasises the growing impact of globalisation on migration patterns and the increasing movement of people across international borders in search of better opportunities and living conditions (Messina & Lahav, 2006).

Silver (2006) investigated the impact of migration on the well-being of migrant family members who remained in their home country. He considers Mexican migrant households and concludes that migration is a transnational phenomenon that has an impact on the emotional well-being of non-migrant family members. The findings revealed that relocation has an impact on close family members, particularly spouses and children. As a result of migration, family members who remain in Mexico report higher depressive symptoms and feelings of loneliness (Silver, 2006).

Schiopu & Siegfried (2006) offer a detailed analysis of workers' remittances, emphasising their significant contribution as financial inflows to developing countries. Their study highlights the prevalence of altruistic motives over investment considerations among remittance senders, driven largely by economic disparities between sending and receiving nations. The research provides valuable insights into the factors influencing remittance patterns, particularly the role of economic conditions and the characteristics of emigrants (Schiopu & Siegfried, 2006).

Zachariah & Rajan (2007) studied the effects of migration, remittances and employment on the short- and long-term development of Kerala. The survey also discovered that the emigrants and returning emigrants were willing to use their income for Kerala's economic development projects. Due to the state's shrinking population and rising work prospects in both the private and self-employment sectors, they noticed that overseas migration remained completely stagnant between 2003 and 2007. According to the study, between 2003 and 2007, there was a 40% drop in unemployment and a gain of over 3 lakh jobs, with a 100% growth in the private sector and a 20% increase in self-employment (Zachariah & Rajan, 2007).

Sasikumar & Zakir (2007) proposed strategies for enhancing the efficiency of remittances and their development potential. Their study offers insights aimed at maximising and socialising the benefits of migration and remittances within the broader context of development. By focusing on ways to improve remittance channels and utilise their positive impacts, Sasikumar and Zakir contribute to the

understanding of how migration can be leveraged for greater economic and social development in sending countries. (Sasikumar & Zakir, 2007)

Rajan & Mishra (2007) demonstrated that International labour migration has a significant impact on the economy and society of the Philippines. The paper explores the supportive role that the Philippine government plays in fostering labour migration and highlights the lessons that India may learn from the experience of the Philippines. The author lists the advantages that the Philippine government offers to foreign workers (Rajan & Mishra, 2007).

Aydemir & Borjas (2007) examined the differences in the effects of international migration on Canada, Mexico and the United States across the three countries. In each of the three nations, they discovered a statistically significant negative link between the shift in labour supply caused by immigration and wages. A 10% change in the labour supply corresponds to a 3%–4% change in wages (Aydemir & Borjas, 2007).

Varma (2007) explores how globalisation influences immigration between India and the U.S., particularly in the realm of scientific knowledge sharing. Based on a review of literature and interviews with 120 Indian scientists and engineers conducted from 2002 to 2004, the study argues that international migration is more than a consequence of globalisation; it reflects historical trends. Globalisation has facilitated a new form of immigration characterised by rapid, interconnected social interactions among technical immigrants, regardless of geographical boundaries. The advent of real-time online communication and efficient travel options has challenged traditional notions of borders, immigration processes and assimilation. The study highlights how technological advancements and changing dynamics in knowledge exchange are transforming immigration patterns in the age of globalisation (Varma, 2007).

Osili (2007) examined how emigrant remittances impact both emigrants and their households of origin, emphasising the potential for savings in the home country to bolster capital accumulation in labour-exporting nations. The study found empirical support for an altruistic model of transfer behavior, indicating that

wealthier origin families tend to receive lower remittances, all else being equal. In particular, remittances aimed at investments in the origin country correlated positively with household wealth. These understandings suggest that remittances can stimulate economic development by alleviating poverty and facilitating savings for capital formation in the country of origin. Overall, the study highlights the significance of remittance utilisation and the socio-economic status of households in the country of origin (Osili, 2007).

Ratha (2007) suggests that remittances enhance household standards of living, including housing, education, health and personal esteem. At the household level, remittances are now seen as the most economical source of development finance. The argument posits that remittances typically supply capital to small-scale entrepreneurs, thereby fostering entrepreneurship (Ratha, 2007).

Faini (2007) examined how skilled emigration affects educational achievements in the home country. He suggested that highly skilled emigrants tend to remit less, despite potentially higher earnings, due to prolonged stays abroad and family reunification in the host country. These factors are likely to decrease the overall propensity to remit, making it an empirical question to assess the impact of brain drain on total remittances (Faini, 2007).

Coleman (2008) claims that the main factor impacting the size, rate of change and composition of most European countries today is international migration. In some northwestern countries, migration is causing a relatively significant population increase, slowing the decline in the south and accelerating the decline in the east. There is a widespread belief that a large influx of immigrants causes the population of the host country to significantly increase the size of the working-age population and helps to markedly reduce the dependency costs of the elderly. The age structure of immigrants is quite often younger than that of the host population (Coleman, 2008).

According to Kumar & Hussain (2008), India has experienced a rise in labour migration since the 1990s. The report discusses more than just problems with Indian workers migrating abroad. The topic of migrant worker protection policies is

also covered along with how to promote and maintain them same. This paper takes a good faith effort to evaluate the Emigration Act of 1983 in depth. It also makes an effort to show how India's IT-enabled sector has grown over the years. This study presents a solid case for the necessity of enhancing multilateral collaboration to streamline the migration process (Kumar & Hussain, 2008).

Lee et al., (2008) investigated the relationship between immigration and economic growth in the United States, as well as the impact of emigration on the country. They concluded that skilled immigration had a significant impact on the US economy, particularly in the Engineering and Technology sector. These industries grew dramatically as a result of immigration from all over the world, particularly from poor countries. Over time, the development of these sectors contributed significantly to the United States' total economic growth. They also discovered that advanced education in subjects such as science, technology, engineering and mathematics is strongly linked to a higher rate of entrepreneurship and creativity among both foreign-born and US-born individuals. According to this study, towns such as Austin, San Diego, and Seattle are well-known among immigrants in the United States and are considered to be their home (Lee et al., 2008).

Farooq & Javed (2009) in their study 'Impact of International Migration on migrant's families left behind in the rural area of Pakistan' noted that at the start of the migration, women experienced loneliness and an increased sense of responsibility as they took on more tasks and responsibilities in their husbands' absence. In addition to this, children's feelings of isolation and a lack of appropriate rules may result in behavioral changes and psychological issues (Farooq & Javed, 2009).

Sahay (2009) analysed the brain gain strategies and human capital for the country of origin and also the promotion of the economic development of the countries of origin. This study revealed that highly skilled labour emigration is both a form of brain drain and a brain gain and the magnitude of brain gain and brain drain varies from country to country. The two most important measurable benefits of emigration are migrant remittance and savings. Some return migrants make

significant contributions to their home country's growth by investing in certain industries, education and health. The Brain Drain is intimately linked to a country's underdevelopment because developed countries can benefit from the immigrants' skills, expertise and information. Finally, the study discovered that international migration helps to bridge the gap between developing and developed countries and improves global connections (Sahay, 2009).

Wei Li (2009) undertook a study on highly skilled Indian migration to Canada and the United States. The goal of this research was to better understand the various policies and processes of highly skilled emigration from India to Canada and the United States, as well as the effectiveness of recruitment initiatives. The study found that both of these countries adopted several immigration policies to boost legal immigration and to restrict illegal immigration. The number of emigrants in both Canada and the United States is on the rise, according to this study, especially after the implementation of current emigration laws. Another finding of this research is that the working environment for Indian immigrants in Canada is inferior to that in the United States. However, Canada provides a welcoming social atmosphere for its newcomers. It has one of the best social welfare and healthcare systems in the world. Both the United States and Canada rely heavily on China and India for highly trained labour (Wei Li, 2009).

Shylaja (2010) has undertaken a study on the effects of labour migration on the socioeconomic and demographic characteristics of the people in Kerala. The study was based on primary data gathered from the rural and urban areas of Thiruvananthapuram, Pathanamthitta and Malappuram districts. She discovered that emigration significantly contributes to the shift from large to small households. The survey also discovered that emigrant households had improved living standards, better hygienic and sanitary circumstances and greater assets thanks to the influx of remittances (Shylaja, 2010).

Kapur (2010) examines how skilled migration affects India's economy beyond the basic 'brain drain' concept. He argues that the impact of migration varies depending on who migrates and their reasons, introducing new methods and

evidence to measure these factors and their outcomes. For example, migrants with education enrich India's democracy by creating political opportunities for marginalised groups. Migration also influences older Indian elites' attitudes toward political change. Education gained abroad brings expertise back to India, integrating it into the global economy, enhancing its international reputation and redefining traditional citizenship ideas. The study highlights how international migration acts as both a cause and a result of globalisation, emphasising how its effects on home countries are shaped by internal factors. 'Diaspora, Development and Democracy' gives a comprehensive view of the Indian migrant community and explores the complex political and economic impacts of migration on India (Kapur, 2010)

Zachariah & Rajan (2010) examined the characteristics of emigration, return emigration, and remittances in light of an increase in oil prices in the Gulf region. The study found that the number of emigrants rose from 13.6 lakhs to 21.9 lakhs between 1998 and 2008, whereas the number of returning emigrants rose from 7.4 lakhs to 11.6 lakhs. Furthermore, the total amount of remittances rose from 18.4 thousand crore to 43.3 thousand crore. The study also showed that emigrants' educational standing has greatly improved and the Muslim minority still accounts for more than 40% of all expatriates (Zachariah & Rajan, 2010).

Roberts (2010) clearly emphasised a worldwide shortage of trained nurses that is being filled to an ever-increasing extent by international migrants. This process is situated within the context of the 'Global Care Chain,' which relocates domestic workers and nurses transnationally to the (primarily) affluent northern developed societies to fill a care gap, thereby relocating an 'emotional surplus'. Both are highlighted by Kerala's peculiar developmental model, which is said to have ensured the state considerable progress on the socio-economic front even without external aid. The Kerala nurse migration stream has heavily favored the Middle East, mirroring broader geographical and institutional hierarchies in international nurse recruitment (Roberts, 2010).

Sahoo et al., (2010) examine the shift from temporary migrants to permanent residents, emphasising the socio-economic and cultural impacts of this transition.

This trend, driven by globalisation and technological advancements, signifies broader changes in migration patterns and policies, calling for a deeper understanding of its long-term consequences. This paper is an exploratory study of this contemporary phenomenon, which has not received much attention from academics and policymakers in India. Using Indian H-1B visa holders in the United States as a case study, the paper outlines the implications of this shift and highlights the need for more comprehensive research on this evolving migration trend (Sahoo et al., 2010)

Silver (2011) investigated how migration affected migrant families who remained in their nation of origin. He recognises that migration is a global issue and that it has an impact on the emotional health of non-migrant family members by taking into consideration Mexican immigrant families. The findings showed that close family members, particularly the husband and children, are impacted by migration. Family members who remain in Mexico report an increase in depressive symptoms and feelings of loneliness due to migration (Silver, 2011).

The study titled ‘International Migration, Remittances and its Macroeconomic Impact on Indian Economy’ by Singh & Hari (2011) provides an in-depth examination of the effects of remittances on various macroeconomic and developmental aspects of the Indian economy. Using data spanning from 1971 to 2008, the study reveals a consistent upward trend in remittances over the past fifteen years. Singh and Hari's analysis emphasises the significant role that remittances play in India's economy (Singh & Hari, 2011).

Antman (2012) examined how migration affects the entire family left behind in his paper, ‘The Impact of Migration on Family Left Behind’. This study looked at how migration affected women who stayed behind, kids who stayed behind and parents who stayed behind. It provides fresh evidence regarding how migration affects aging parents. He also noted how migration affected the health, education and labour supply of non-migrant spouses as well as the education and welfare of children left behind (Antman, 2012).

Giordano et al., (2012) examined the process of skilled migration in depth in their work ‘The Indian Policy of Skilled Migration: Brain Return Versus Diaspora Benefits’. They found that there has been a continuous increase in the movement of skilled labourers from India in recent years and the combination of demographic and economic factors influences future migration patterns from India. Excessive mobility of skilled workers may harm a country’s growth and development (Lowell and Findlay-2001). In terms of the sending countries, however, skilled labour migration represents a brain gain rather than a brain drain (Buga and Meyer, 2012). This study further found that when the migrants return to their native country, they will bring with them a wealth of experience, skills and expertise and the sending country can make use of them for the nation’s development (Giordano et al., 2012).

Fabien et al., (2012) discussed the dynamics of migration in a developing economy. They made the point that worker mobility might boost an economy in transition. It demonstrates that over time, as sending economies expand, natives prefer to remain at home and pursue employment opportunities there, hence decreasing the likelihood of emigration (Fabien et al., 2012).

Sujathan (2012) studied the impact of international migration on the socio-economic issues faced by the elderly left behind in Kerala. Kerala, known for its large elderly population and significant number of international migrants, faces a unique socio-economic situation. As younger family members migrate abroad, the elderly left behind encounter numerous challenges, including neglect, reduced activity, poor well-being and insufficient income. This transition to the empty-nest stage marks a critical phase in the family life cycle, where the elderly become increasingly dependent on their families and communities. Despite government policies aimed at protecting elderly rights, these efforts often fall short as none can fully address all the needs of the elderly. Therefore, improving family support and revising state assistance strategies are essential to enhance the living conditions of the elderly (Sujathan, 2012).

Otoi et al., (2013) attempted to identify the theoretical and empirical links between domestic and international labour migration. The most popular research

methodologies for both types are reviewed in addition to a review of the contributions that highlighted the dichotomy between the two forms of migration and attempted to conduct an integrated analysis. This technique is validated by an empirical analysis of net domestic and international migration for numerous OECD nations, which also evaluates the degree of divergence between them that necessitates a different strategy (Otoi et al., 2013).

Bhawra's study titled 'Irregular Migration from India to the EU: Evidence from the Punjab' (2013) reveals the concerning rise of irregular migration from Punjab to the European Union in recent years. The study highlights the urgency for national authorities to address this issue promptly and effectively. Bhawra's findings highlight the challenges posed by illegal immigration, emphasising the need for stringent measures to curb and manage irregular migration flows. The study contributes to understanding the socio-economic implications of irregular migration from Punjab to the EU (Bhawra, 2013).

According to Arifeen (2013), international remittances made by migrants are the single most significant source of foreign currency, particularly for nations that export labour like Bangladesh. Remittances, according to the research, can complement domestic consumption and investment while also easing foreign exchange bottlenecks, financing for development, improving the balance of payments and relieving pressure on external borrowing (Arifeen, 2013).

Sharma (2013) discusses the migration of Indian school teachers, motivated by global demand, dissatisfaction with the domestic education system, and the desire for improved living conditions. This trend underlines the competitive dynamics of the international teacher market and emphasises the necessity for reforms within India's education system to retain skilled educators (Sharma, 2013).

Doriani (2014) examined the potential consequences of the pattern of Indian immigration to the United States. The author wanted to learn about Indian emigrants' perspectives on how their experiences in America shaped their attitudes toward India. The study found that after their move to the United States, the respondents became more individualistic, based on the data the researcher gathered.

They have greater freedom and independence in the United States than they have in India. The respondents stated that they had lost their personal growth in India due to a lack of individualism. The present chances and freedom do not enable them to return to India and the American culture of enhanced independence favorably promotes their personal development (Doriani, 2014).

Percot (2014) analyses the migration of Kerala nurses to the Gulf since the late 1970s. The study looks at how these nurses and their families plan financially and use community networks to manage migration challenges. It compares Gulf migration to Western migration, noting differences in economic outcomes and working conditions. The paper also examines how nurses' status as professionals and women has evolved in their home country, highlighting both economic benefits and social changes (Percot, 2014).

The Migration Policy Institute (2014) conducted a study titled 'The Indian Diaspora in the United States', which looked at the various benefits that Indians received through emigration to the United States. According to this research, there are approximately 2.6 million Indians and their offspring living in the United States. The Indian population in the United States is the third largest immigrant group and it is a relatively young population with strong academic achievements. Indians are extensively dispersed across the United States and data shows that California, New Jersey and Texas are the most popular destinations for Indians in the United States. The city of New York has the largest population of Indian immigrants by metropolitan area. The Indian Diaspora in the United States supported India in a variety of ways, including money transfers, skill sharing, technical expertise and social networks (MPI, 2014).

Kumar et al., (2014) examined the contribution of skilled labourers to the development of India. The study discovered that migrants' decisions to migrate or not, as well as their return, are heavily influenced by the type of employers and the destination nations' existing migration procedures. It was clear that migration increases the migrants' level of life, personality development and talents. Nations can use their experience, exposure gained from outside, knowledge and other talents

to aid India's progress and the sending countries can benefit from brain gain as an alternative to brain drain (Kumar et al., 2014).

Kurien (2014) examines how international migration affects the Mar Thoma Syrian Christian denomination in Kerala. Migrants' financial contributions and new expectations have led to changes in the denomination. The rise of evangelical and charismatic churches, fueled by international networks and economic affluence, challenges traditional denominations. The study uses theories of religious change and transnationalism to explain these social shifts (Kurien, 2014).

Khan & Valatheeswaran (2016) study the effects of international migration on the labour supply in Kerala. They find that migration reduces market work for both men and women left behind. Men shift from wage work to self-employment, while women focus more on household duties, especially in rural areas (Khan & Valatheeswaran, 2016).

Ruksana (2016) investigated the long-standing trend of Keralites migrating within India and abroad in search of employment opportunities. Kerala leads in both types of migration. Her research identifies that remittance behavior is shaped by a range of interconnected factors including age, education, duration of overseas stay, wages, migrant status, working and living conditions, motivations for remitting, household size and related variables (Ruksana, 2016).

According to Boustan (2017), the United States has long been viewed as a land of opportunity for immigrants. However, native-born Americans have expressed concern in the past and present that immigrants fail to integrate into American society, resulting in reduced salaries for existing workers. The research on historical and contemporary migrant flows is reviewed in this study, revealing new insights on migrant selection, assimilation of immigrants into the US economy and society and the impact of immigration on the labour market (Boustan, 2017).

According to Gellat (2017), the National Immigration Law Center (NILC) has actively opposed the implementation of the Merit-Based Immigration System (MBIS) Rule by taking various legal measures. The MBIS Rule, proposed by the

Trump administration, aims to enforce high-income thresholds and restrict access to public assistance programs such as welfare, food stamps and public housing for immigration candidates. Gellat's analysis suggests that this rule could discourage low-income individuals from pursuing immigration to the United States. The NILC's efforts underline the ongoing debate and legal challenges surrounding immigration policies that could significantly impact vulnerable populations seeking to immigrate to the U.S. (Gellat, 2017).

Gul et al., (2018) researched the difficulties and constraints faced by women who were displaced owing to migration. The difficulties faced by women who are left behind are discovered in this study. Women who are left behind deal with a variety of issues, including extramarital affairs, divorce, psychological issues, loneliness, and sexual disorders (Gul et al., 2018).

Scheffel & Zhang (2018) studied how international migration affected elderly parents who were left behind in China emotionally. They concluded that the one-child policy and the accompanying aging of the population pose the biggest problems for the care of the elderly in rural China. They investigated the impact of adult children moving away on the emotional well-being of elderly parents who remain behind. They discovered that moving causes a certain amount of loneliness for the elderly parents and lowers their level of satisfaction. Their findings have a big impact on China's economic growth because emotional health is a major factor in overall health status (Scheffel & Zhang, 2018).

Sanitha & Noushad (2018) examined how migration affected older people who were left behind in Kerala and found that it decreased the number of family members who could provide care and decreased the standard of family assistance. Additionally, they believed that migration diminished the health and happiness of elderly parents who remained behind. They determined that there is a bad association between moving abroad and elderly family members who are left behind working (Sanitha & Noushad, 2018).

Ugargol & Bailey (2018) focus on the gendered burden of caregiving left behind by male migrants. Women, especially spouses and daughters-in-law, assume

significant caregiving responsibilities in the absence of male members. In-depth interviews reveal increased perceptions of burden due to unbalanced exchanges and unmet expectations, despite the temporary financial autonomy provided by remittances (Ugargol & Bailey, 2018).

Williams (2019) examined the working field of labour, education, origin, demographics, and geographic location of South Asian immigrants in the United States, particularly Indian immigrants. He discovered that the educational level of the Indian population is three times higher than that of the host country's population. Indians in the United States tend to work in IT, engineering, and healthcare. The majority of Indian immigrants in the United States come from Gujarat, followed by Punjab, and their favored settling areas include New York City, San Francisco, Chicago, Washington, Houston and Dallas. The study further found that the emigrants represent nearly all of India's major religions, including Hindus, Muslims, Sikhs, Jains, Christians and Zoroastrians (Williams, 2019).

Bhattacharjee (2019) explored the policies and migration patterns of Indian health professionals (HPs) to European Union (EU) member countries in her paper titled "Migration of Indian Health Professionals to the European Union." The study examines the factors influencing emigration among health professionals, highlighting both push and pull factors that drive their decision to migrate. Reasonable salary, suitable working conditions and professional advancement are all pull factors that influence destination country selection. Low salaries, stagnant career progression, and poor working conditions, on the other hand, encourage health professionals to leave their home nation. Furthermore, demographic transitions, illness burden, population-influencing factors and health conditions are all factors that contribute to high-level professional emigration (Bhattacharjee, 2019).

Guha (2019) explores the impact of EU enlargement and Brexit on Indian immigrants in her article 'Challenges and Possibilities for Indian Migrants in the European Union.' India ranks at the top and sends the largest number of migrants to the EU, with significant numbers choosing to settle in Germany, Spain, Italy and the

United Kingdom. Among these destinations, the UK stands out as the most preferred, experiencing a staggering 900% growth in Indian migration over recent decades. However, EU enlargement has altered migration dynamics, intensifying competition for jobs among Indians from newer member states like Poland and Slovakia in the UK. Similarly, Indian migrant workers in Italy and Spain face increased competition from Romanian and Bulgarian migrants. This shift has reshaped the patterns, scale and nature of Indian emigration to the EU, displacing India's traditional dominance in favor of newer member states. Despite these challenges, the UK, Italy and Spain remain primary destinations for Indian migrants within the EU, highlighting ongoing complexities and opportunities in Indian-European migration dynamics (Guha, 2019).

Melin (2019) studied the position of Indian migrant workers in the United Kingdom and Belgium, as well as the impact of social security rights upon their return to India. Even though India and the United Kingdom do not have a bilateral agreement, the United Kingdom's existing laws protect Indians' social security entitlements. Regardless of the migrant workers' nationality, any migrant employees who work in the UK and contribute to the UK's social security benefit scheme are eligible to receive benefits and export benefits. Migrant employees must meet one condition: they must have contributed for a sufficient number of years to the UK social security system. So no one can assert that Indian migrant workers would be worse off without a bilateral deal between India and the United Kingdom, but a bilateral agreement may protect Indians' social security entitlements. In the case of Belgium, every bilateral agreement should include protections that eliminate all of the risks that migrant workers confront. As a result, the bilateral agreements struck by India and Belgium include provisions ensuring that contributions paid in one nation are taken into account for the acquisition, recovery, and acquisition of old age and invalidity benefits. The bilateral agreement between India and Belgium permitted migrant employees to export their social security benefits from their working country to their home country (Melin, 2019).

Rajan (2019) analysed the evolving visa requirements for Indian nationals in the European Union (EU). The study highlights the impact of agreements like the Common Agenda for Migration and Mobility (CAMP) signed between India and the EU in 2016, which aimed to enhance labour mobility and social security. Rajan also discusses bilateral social security agreements between India and EU nations such as Norway, Denmark and Luxembourg, which further facilitate migration. The study contrasts Germany's Green Card Programme, launched in 2000 to attract skilled workers, with visa procedures in the US, Canada and Australia, noting the relative ease and additional benefits offered by these countries. Rajan underlines the significance of the Schengen Agreement, which allows for the issuance of the Schengen visa for short-term stays and the national visa for longer stays in EU member states like Italy. Italy's introduction of a new EU-wide immigration visa in 2017 aims to attract managers, highly skilled professionals and trainees (Rajan, 2019).

Mehdi et al., (2019) researched the migration patterns, policies and obstacles from India to the European Union. Following the 2008 financial crisis, European Union members recognised the need and relevance of shifting from traditional industry-based economies to knowledge-based economies. They began to recruit talented personnel from both European Union member states and third-world countries. India and member states of the European Union have agreed on a Common Agenda on Migration and Mobility (CAMP). The cost of school, scholarship availability, visa restrictions, resident permit card and study period are all important considerations in determining student migration. In the European Union, Indian migrants confront numerous hurdles, including complex legal barriers, citizenship acquisition and prejudice against TCNs (third-country nationals), particularly in Greece and Austria (Mehdi et al., 2019)

Breschi et al., (2019) researched the variables affecting migration and the rate of migration. The study found that the UAE and Saudi Arabia are the most popular destinations for Indian migrant labour, particularly low-skilled and unskilled employees. However, when it comes to high-skilled professionals, the United States

takes the lead (Dumont et al 2010). Skilled worker migration is a brain drain, with industrialised countries reaping all of the benefits. However, after the 1990s, there was a belief that skilled labour migration has a positive side, such as brain gain and that nations like India can benefit greatly from the movement of skilled people to industrialised countries. Migrant workers can transfer knowledge back to their native nation and affect economic growth and productivity (Breschi et al., 2019).

Sebastian (2019) looked into migration trends, their social, economic and political ramifications and the variables that affect the movement of nurses from Kerala to the UK. According to the study, nurses prefer to travel to the United Kingdom and the United States and recently enacted severe regulations have diminished the significance of these two countries. Canada and Australia have now emerged as the preferred destinations for nurses. Another finding is that nurse migration from Kerala is a time-consuming and expensive process, because before they migrate, they must obtain the necessary educational qualifications and undergo an intense training Programme. Because of the high cost of migration and the high cost of nursing degrees in Kerala, the migration of nurses from Kerala is skewed towards the wealthier classes (Sebastian, 2019).

Khan (2019) examines the involuntary migration of Muslims from Malappuram, Kerala, to the Gulf countries, highlighting factors like poverty, unemployment, the dowry system, and aspirations for improved living standards as primary motivators. The availability of Umrah and free visas to Saudi Arabia further contributed to this trend, emphasising the complex socio-economic factors driving migration from the region (Khan, 2019).

Abraham (2020) examines how international migration affects job changes for Kerala workers using data from the Kerala Migration Survey 2011. The study shows that most migrants take service sector jobs abroad, regardless of their previous work. When they return due to tough job markets abroad, they usually go back to their original jobs, with modest changes between phases. Although many want to start businesses after returning, only 10% do, especially among professionals who often move into management roles. The research highlights that while

international work shapes careers, it mostly maintains existing roles except for professionals who advance into management (Abraham, 2020).

Kaur et al., (2021) examined that illegal emigration from India has been extremely common in the United States, the United Kingdom, and other European countries as a result of a desire for a better life and living standards. Migration can take place for a variety of reasons, some of which are legal (work, business, etc...) and some of which are not (illegal migrants). This research looks into the various paths (both legal and criminal) that people use to go to their dream country of opportunities (Kaur et al., 2021).

Gerry (2021) examines how migration changes gender roles and expectations, finding that it empowers women who work abroad and increases autonomy for wives left behind. Despite some social stigmatisation, these women experience greater empowerment, challenging the usual negative views on migration's impact on women (Gerry, 2021).

Dedeoglu et al., (2021) analyse the environmental and economic effects of immigration in the USA, highlighting the complex links between migration, human capital and environmental sustainability. Their study finds that migration and financial development contribute to increased environmental pollution, while economic growth helps reduce it. They observe no significant link between human capital and the environment but note that immigration does boost human capital over time (Dedeoglu et al., 2021)

Gopika et al., (2022) review the economic and social impacts of international migration in India. They find that migration and remittances significantly increase income, reduce poverty and improve health and education, driving economic growth in sending countries. However, these benefits come with social costs for migrants and their families. Additionally, countries receiving migrants face challenges with integration, job competition between migrants and locals and higher public spending on social services. The report also provides recent statistics from the Indian government on migration trends and events (Gopika et al., 2022).

Datta & Basu (2023) investigate the migration of Kerala nurses to Germany in the 1960s and 70s, challenging the idea that migration is mainly male-driven. They highlight how these women disrupt traditional gender roles in migrant households and society. The study argues that while migration often reinforces patriarchy on an international scale, the experiences of these nurses provide important insights into gender roles and the patriarchal nature of diaspora formation (Datta & Basu, 2023).

The in-depth analysis of the review of the literature shows that several studies have been conducted on migration, with the majority focusing on migration to the Gulf region or the Middle East. However, there are relatively few studies on migration to the US. Emigration to the Gulf or Middle East is entirely different from emigration to the USA. Migration to the Gulf region is often temporary, while migration to the USA tends to be more permanent. Semi-skilled and less-skilled workers typically migrate to the Gulf, whereas skilled individuals prefer to migrate to the USA. The factors motivating migration to the USA vary markedly from those influencing Gulf migration. Moreover, the outcomes of these migrations also diverge. In the Gulf, migrants often return to Kerala periodically and consistently send remittances. However, since migration to the USA is usually permanent, the possibility of return is very small, thus migrants to the US tend to send remittances only until their parents or close relatives are alive in Kerala, making this benefit short-term. Additionally, many Kerala migrants in the US are now second or third-generation, with their parents and children living in the US. As a result, future remittances and contact with their native state are likely to diminish.

A significant area for research is identifying the factors or endowments that influence the likelihood of emigration and how the standard of living of households and spending is impacted by migration. Migrants are frequently sending remittances to the sending states and it benefits migrant households economically. Therefore, it is essential to examine the impact of migration on the economic well-being of migrant households in Kerala and to contrast this with non-migrant households. By comparing the spending patterns (standard of living) of US migrants from Kerala

with those of non-migrant households, it is possible to determine whether migration has had a net positive or negative impact on the financial well-being of the households. The impact of migration on the asset holding of migrant households is another possible area of this research. By comparing the asset possession level of migrant households with non-migrant households, it is possible to establish if migration has had an impact on the households. Thus, this study aims to fill the gap by examining the factors driving emigration from Kerala to the USA and its effects on households in Kerala.

2.5. Conclusion.

Several studies have been conducted by different researchers on migration, especially the Gulf migration. These studies typically concentrate on emigration, its impact on sending states, the effects on those left behind and the macroeconomic impact of remittances. However, there have been no specific studies conducted on emigration from Kerala to the US, its determinants and the impact of emigration on migrant households. Thus, this study is an attempt to examine the factors influencing emigration from Kerala to the USA and its impact on households in Kerala.

The next chapter provides an overview of emigration history, global migration trends and the flow of migration from India and Kerala to the US. This foundational overview establishes the background for the study.

EMIGRATION TO THE USA

-
- *Introduction.*
 - *Trends in Global Migration.*
 - *Emigration from India to the US: An Overview.*
 - *H-1B Visa.*
 - *Green Card.*
 - *Emigration from Kerala.*
 - *Conclusion.*
-

3.1. Introduction.

The search for better living conditions, economic prospects and other opportunities, both domestically and internationally is a significant driver of migration (World Bank, 2005). Like many other countries, India has a long history of migration. Before independence, Indians moved to British colonies and took on jobs like working on plantations and lower-level management positions. In 1833 Britishers were forced to import temporary labourers from the Indian subcontinent to work in the plantation sector (Naujoks, 2009; Northrup, 1995). On the other side, the collapse of the cottage industries in India, hike in land rent, heavy dependence on agriculture, seasonal unemployment and famine are some supply-side factors that force Indians to migrate to foreign countries (Jain, 1989; Northrup, 1995). Data show that about one million Indians were recruited as contract labourers in different British colonies between 1830 and 1916 (Tinker, 1974). The majority of them were low-skilled workers and a few of them got jobs in military, police service and other security-related jobs (Thandi, 2008; Chanda & Ghosh, 2012). The main places of origin of these indentured workers were Tamil Nadu, UP, Bihar, West Bengal, Punjab, Maharashtra and Gujarat (Naujoks, 2009). The target countries of these migrants were the Caribbean Islands, the Pacific and Indian Ocean and South-East Asian countries.

Migration from India can be analysed in three different periods after India's Independence. In the first phase, the qualified, skilled and competent persons migrated to industrialised countries like USA, UK, Canada and Singapore. This migration was a type of brain drain (Tinker, 1977). In the second face, less and semi-skilled workers were moved to the oil exporting countries of the Middle East in the 1970s. The hike in the oil price in the 1980s and the resultant increase in demand for labour has increased the speed of emigration to the Middle East from India (Gulati & Modi, 1983; Patra & Kapur, 2003; Rajan & Kumar, 2010; Parida & Raman, 2018). The oil boom witnessed by the Persian Gulf motivated the oil-exporting countries in that region to absorb more workers from outside to bridge the labour shortage. So the demand for both skilled and unskilled labourers increased dramatically. It paved the way for the movement of labours from countries like

India, Sri Lanka, Bangladesh and South East Asian countries. The mass poverty, unemployment, low wages and poor standard of living in India caused many Indians to move to the Gulf region to get new and better opportunities. People are migrating to countries like Canada, the USA, the Middle East, South Asian countries and other countries to find better occupational opportunities. Emigration from India to GCC countries has steadily increased from 2.5 lakh in 1975 to 8.9 million in 2017 (UNDP, 2018). In the third phase, after liberalisation, international migration has diffused all over the world due to the revolution in Information and Communication Technology (Ahmad, 2014; Prakash, 2017). At present, India is considered the top migrant-sending country in the world. In 2020, approximately 18 million Indians were residing across the globe (UN, 2020).

Human migration may be either voluntary or involuntary, so many factors are responsible for both types of migration. The development of urban areas increases the speed of migration. Since these areas are developing every day, the need for labour also increases and it pushes up the process of migration. The wage rate in urban areas is the main attractive reason for such migration. A large number of people left their home country mainly because of unemployment. Developing countries are unable to provide adequate employment opportunities to the increased population. Better employment opportunities in factories, trade, transport and service in the host country motivate people to migrate. People may also migrate due to the political issues and conflicts between them. This is not a voluntary movement and such movements are not based on their will and wish.

Another major influencing factor for migration is the push and pull factors. Push factors include natural calamities, poverty, lack of employment opportunities and political unrest in the homeland compel the natives to migrate to another area. On the other hand, factors like better employment opportunities, higher wage rates, better standard of living and good health facilities in the hostland pull the people into the country of destinations. Economic factors can be judged in terms of the labour standard of an economy, the unemployment situation and the overall health of the economy. If an economy shows a deceleration in growth and the conditions are unfavorable for getting a decent job, a greater number of people probably migrate to a healthier economy, thus these migrants are considered economic migrants. These migrants concentrate on developed nations for the sake of getting a high wage, better

employment opportunities and also the desire to rush from domestic social and political situations. The migrants who are educated, skilled and have low income often come from middle-income populated countries and they prefer developed nations as their country of destination. The emigration of both skilled and less skilled individuals generally has positive and negative impacts on the countries of origin.

On one side emigration and remittances have their impact on the economy as well as the migrants and their households. It directly influences the investment in health, education and the productive capacity of the nation. Also, it increases employment opportunities in the nation through the establishment of restaurants, bakeries, shops and other related establishments. On the other hand, at the individual level, emigration enhances income, leading to a corresponding increase in consumption among migrants and their households. Emigration redesigns food habits, clothing and entertainment schemes. It also improves the skills of labourers and generates a sense of hard work among the migrant communities. Brain drain can be considered a fundamental setback of this increasing trend of migration. Therefore, the state may lose the opportunity to use the potential of the people who are migrated and it reduces the country's domestic production thereby limiting employment opportunities. At the individual level, migration increases the threat of lifestyle diseases, raises the possibility of family breakups (due to distant living partners) and increases the number of people left behind (such as parents, spouses and children).

3.2. Trends in Global Migration.

It is believed that in the early period, people migrated mainly to conquer the land area and expand their settlements. But the new history of migration begins with industrialisation in the 18th century. During those days migration took place in three forms, labour migration, refugee migration and urbanisation. It was observed that labour migration reached its peak (3 million per year) in the early 20th century. There was a remarkable number of internal migrations in the US due to industrialisation. A sea change happened at the pace of migration around the world immediately after both World Wars and the great depression. After the Second World War, many nations gained Independence and the creation of new nation-

states changed the migration trends (Appleyard, 1984). Long-term data on international migration have shown that migration trend is not constant throughout the world. Economic, geographic, demographic and other factors directly influence these trends. This creates a specific movement pattern between the country of origin and the country of destination. This migration corridor typically connects underdeveloped nations with advanced economies such as the US, the UAE, Saudi Arabia, and Germany. (WMR, 2022).

Before the spread of the Covid-19 pandemic, the number of international migrants had grown significantly. It was estimated that in 2020, the number of people living outside their home country was 281 million. Between 2000 and 2010, there was an increase of 48 million international migrants globally. During 2010-2020, this number increased by another 60 million. Data show that in 2020, the number of international migrants in Europe was 87 million, making it the region with the largest number of international migrants. Northern America stood second with 56 million migrants, followed by Western Asia and Northern Africa. Middle-income countries around the world contribute the major portion (177 million) of international migrants (UN DESA).

Table.3.1
Key Facts and Figures of Current Global Migration.

Indicators	2000	2022
Estimated Number of International Migrants	173 Million	281 Million
Estimated Proportion of World Population Who are Migrants	2.8%	3.6%
Region With the Highest Proportion of International Migrants	Oceania	Oceania
Country With the Highest Proportion of International Migrants	UAE	UAE
Global International Remittances (USD)	128 billion	702 billion

Source: World Migration Reports 2000 and 2022.

Table 3.1 shows that the estimated number of international migrants in 2022 is 281 million, compared to 173 million in 2000. The proportion of migrants in the world population was 2.8% in 2000 and increased to 3.6% in 2022. Similarly, during

the period from 2000 to 2022, global international remittances increased significantly from dollar 128 billion in 2000 to dollar 702 billion in 2022.

Table.3.2.

Trends in the Number of International Migrants since 1970.

Global migration patterns reflect dynamic shifts in demographics, economics and geopolitics. Examination of the dynamics of global migration is crucial for realising the interconnectedness of societies worldwide.

Year	Number of International Migrants	Migrants as a % of the World's Population
1970	84460125	2.3
1975	90368010	2.2
1980	101983149	2.3
1985	113206691	2.3
1990	152986157	2.9
1995	161289976	2.8
2000	173230585	2.8
2005	191446828	2.9
2010	220983187	3.2
2015	247958644	3.4
2020	280598105	3.6

Source: UN DESA, 2008; UN DESA, 2021a.

Table 3.2 shows that the number of international migrants in 2020 was 280598105 compared to 84460125 in 1970. This indicates a continuous increase in the number of people seeking employment opportunities outside their native countries. The implications of this trend are various, influencing demographic structures, labour markets, cultural diversities and political landscapes across nations. This rising trend emphasises the pressing need for comprehensive and cooperative approaches to address the challenges and opportunities presented by international migration.

Table 3.3.**Top Rated Destinations and Origins of International Migrants (2020).**

Recognising the important destination and origin of international migrants is essential for shaping informed policies, promoting socio-economic integration, fostering international cooperation and addressing humanitarian challenges associated with migration. Table 3.3 analyses the key destinations and their respective origins of international migrants in 2020, quantified in millions.

Rank	Destination		Origin	
	Countries	Number (Million)	Countries	Number (Million)
1	USA	51	India	18
2	Germany	16	Mexico	11
3	Saudi Arabia	13	Russian Federation	10.8
4	Russian Federation	12	China	10
5	United Kingdom	9	Syrian Arab Republic	8

Source: UN DESA, 2021a.

As per the UN DESA report of 2021, during the past 50 years, the United States has remained the top destination for migrants with nearly 51 million international migrants. Germany has climbed to become the second most popular destination for international migrants with about 16 million and Saudi Arabia is the third most popular destination with 13 million. The Russian Federation and the United Kingdom round out the top five destination nations with around 12 million and 9 million international migrants, respectively.

India is considered the top origin country of migrants, with approximately 18 million people living abroad, making it the largest emigrant population in the world. Mexico is the second-largest origin nation with about 11 million people. The Russian Federation is the third largest origin country followed closely by China (around 10.8 million and 10 million respectively). The fifth-largest origin country is the Syrian Arab Republic, which has nearly 8 million people living abroad, primarily as refugees, due to internal turmoil and emigration over the past ten years.

It shows the substantial economic contributions made by migrants through remittances and skills transfer. These diaspora communities also foster cultural exchange and enhance diplomatic ties between host and home countries. However, concerns about brain drain may arise and it impacts domestic development efforts.

Table-3.4

Top Three Countries of Remittance Receipts (2021).

Remittances serve as a vital financial lifeline for millions of families worldwide, supporting their basic needs and improving living standards. Moreover, these inflows significantly boost the recipient countries' economies, stimulating consumption, investment and overall economic activity. Table 3.4 given below shows the top three countries of remittance receipts in the year 2021.

Countries	Remittances (USD million)
India	US Dollar 89,375 million
Mexico	US Dollar 54,130 million
China	US Dollar 53,000 million

Source: World Bank Remittances, 2022

Migrants contribute significantly to their home country's economy by sending large sums of money back through remittances. This has positioned India as a leading recipient of foreign remittances. In 2021, India received a remittance of US dollar 89375 million followed by Mexico (US dollar 54130 million) and China (US dollar 53000 million (World Bank 2022). The significant remittance receipts in 2021, particularly for India, Mexico and China, highlight the resilience of their economies and the crucial role of remittances in supporting household welfare and economic stability. These inflows provide essential funds for basic needs, healthcare, education and local investments. The inflow of remittances contributes to poverty reduction and economic development.

3.3. Emigration from India to the US: An Overview.

Since India's independence, millions of people have left the country to escape from problems like unemployment, inequality and poverty. The new wave of

Indian immigrants identifies the United States, the United Kingdom, Canada, Australia, New Zealand, EU Countries and Gulf Countries as their safe heaven. Today, however, migrants' decisions are heavily influenced by the desires of the global middle class and business community. Everything has become more accessible and convenient to travel and migrate to the preferred locations. According to recent studies conducted by the Indian government, around 1% of Indians reside outside of their country of origin. More than 1.33 billion Indians reside permanently abroad in various nations. The same report also claimed that over 6 lakh Indians acquired foreign citizenship in the previous five years while renouncing their citizenship. Indians are currently the largest immigrant group in Canada, the United States and the United Kingdom (Sharma, 2022).

The US is considered as the land of migrants and millions of the world are living and working there. The US has a skewed attitude towards migrant workers especially the educated and skilled. Indian immigration to the US started for the first time during the early 19th century. It was a small number and concentrated in low-skilled farm labourers. In 1960 the number of Indian immigrants living in the US was 12000 and it was only 0.5% of the overall immigrant population in the USA (Zong & Batalova, 2017). However, the mode of migration from India to the US changed a lot between 1965 and 1990 when the US administration introduced a series of legislative changes in the form of the removal of national origin quotas, created employment-based permanent visas and the introduction of temporary skilled work programs.

Throughout the history of immigrants in the US, immigration policy has undergone significant transformations, each period shaped by distinct social, economic, and political factors. During the first cycle of immigration policy in the United States, spanning from the late 18th to the mid-19th century, significant developments shaped the nation's approach to immigration. The enactment of the Naturalisation Act of 1790 established early regulations, requiring a two-year residency for free white persons to become citizens (Lemay & Elliot, 1999; Koudela, 2013). Subsequent legislation, such as the Naturalisation Act of 1798,

reflected political concerns and increased residency requirements. Immigration grew rapidly, driven by factors such as crop failures, the Irish Potato Famine and industrialisation-related unrest in Europe. Events like the Mexican War and the California Gold Rush further influenced migration patterns. Societal fears emerged regarding the influence of Catholic immigrants, exemplified by the anti-Catholic Know Nothing Party. The opening of Castle Garden in 1855 marked a significant milestone in immigration processing. Overall, this period witnessed evolving regulations, demographic shifts and societal anxieties regarding the cultural and political impacts of immigration (Koudela,2013).

Significant changes occurred in the migration policies of the US during the second cycle of US immigration policy from the Civil War to World War first. The Homestead Acts encouraged European settlement in the Midwest, but measures like the Anti-Coolie Act targeted Chinese immigrants. Discrimination persisted despite the Naturalisation Act of 1870. Tensions rose with Japanese immigration, leading to discriminatory measures like segregated schooling. The Gentleman's Agreement of 1907 aimed to address these tensions, but subsequent exclusion acts reflected ongoing discrimination. Concerns over immigration from Southern and Eastern Europe led to the immigration Commission's recommendations for reductions. Heightened nationalism and anti-immigration sentiment in the 1920s, fueled by fears of the First Red Scare, led to deportations and a broader nativist movement against immigrants seen as threatening American society (Koudela,2013).

The third cycle of immigration policy in the United States, from the 1920s to the 1950s, witnessed significant legislative changes and ideological shifts. The Emergency Quota Act of 1921 marked a turning point, restricting immigration from Eastern and Southern Europe based on national origins, fueled by concerns about labour market pressures and culturalism. (Higham,1955). The Johnson-Reed Act of 1924 further reduced immigration, reinforcing the ideal of American homogeneity by excluding Jews and Eastern Europeans. The Great Depression and World War II decreased migration, but the war's labour shortages prompted immigration policies to fill the void, such as the Bracero Program with Mexico. The Immigration and

Nationality Act of 1952 abolished racial limitations but maintained quotas, emphasising preferences for skilled workers and family ties while imposing stringent security measures. McCarthyism and the Red Scare led to civil restrictions and ideological purges, culminating in the exclusion of prominent figures like Graham Greene and Gabriel Garcia Marquez (Koudela,2013).

In modern times, US immigration policy underwent significant shifts, particularly after the Immigration and Nationality Act of 1965 abolished the National Origins Formula and introduced quotas based on country of origin, albeit without limitations for Western and Northern European countries (Lemay & Elliot,1999; Koudela,2013). Amendments followed, reflecting changing global dynamics, such as the Refugee Act of 1980, which aligned US policy with the UN convention on refugees and led to the admission of millions of refugees and permanent immigrants. The Immigration Reform and Control Act of 1986 aimed to address illegal immigration by legalising millions of undocumented immigrants and imposing sanctions on employers hiring unauthorised workers (Anderson,2010). Subsequent measures included the establishment of the Visa Waiver Pilot Program and the Diversity Immigrant Visa Program, reflecting efforts to diversify the immigrant population. However, increasing Spanish minority pressure and conflicts, along with the 2001 terrorist attacks, prompted stricter measures, exemplified by the Illegal Immigration Reform and Immigrant Responsibility Act and the US Patriot Act, which expanded grounds for excluding aliens associated with terrorism. These legislative changes reflect the complex interplay of political, social and security concerns shaping US immigration policy in modern times.

Over the past two centuries, migration to the United States has been primarily driven by economic opportunities or political factors such as persecution or pressure based on religion or ideology. Throughout this time, US immigration policy has evolved in response to changing circumstances, often imposing discriminatory restrictions that influenced emigration from regions subject to such limitations. However, the Immigration Act of 1990 marked a significant shift towards a more egalitarian approach, ushering in a new era in migration policy and

US global relations ((Koudela,2013). This legislation signaled a departure from racist practices, fostering a more liberal consideration of cultural diversity. Despite earlier restrictions, the attraction of America as a destination for emigration persisted among Eastern Europeans, reflecting enduring aspirations for opportunity and a better life. Looking ahead, this shift towards inclusivity has the potential to positively impact US society both economically and demographically, shaping a more diverse and dynamic future.

The data from the OECD shows that the average National inflow of immigrants to the US was 50507 during 1931-1946 and it reached its highest during 2001 and 2010. Around one million people are moving each year to the US. More than 20 % of the population of New York City, New Jersey and California are migrants (OECD). In 2016 the US gave admission to 1.18 million legal immigrants and among these 48 % were the immediate relatives of US citizens, 20% were family-sponsored, 12% were employment-based and 4.2 % were part of the diversity immigrant visa program (2016 Yearbook of Immigration Statistics). The USA has issued a variety of immigrant and non-immigrant visas. The emigration of people is closely connected with the type of visas that emigrants use. Non-immigrant visas are temporary visas issued by the USA for business and tourism purposes, while immigrant visas are permanent visas that allow individuals to live in the USA permanently. The introduction of H-1B visas in the USA in 1990 accelerated the flow of skilled labour emigration from India to the USA.

In 2017, the US administration passed the Reforming American Immigration for a Strong Economy (RAISE) Act to reduce the level of legal immigration by 50 % and make ‘America great again’. New policies will reduce the size of legal immigration by half by 2021 (National Foundation for American Policy Analysis). The denial rate on H-1B visas, imposed a ceiling on refugee admission, denial of military naturalisation and the increased number of people who were waiting for naturalisation are the important changes that occurred in the US after the introduction of new immigration policies during 2016-2021. The percentage of immigrant population in the US total population was only 4.7% in 1970. It increased

to 12.9 in 2010 and 13.7 in 2019. The average annual growth in the percentage of immigrants between 2015 and 2019 is lesser. The foreign-born population in the US remains almost constant between 2018 and 2019 (American Community Survey, 2019).

A study on the characteristics of Indian immigrants in the US reveals that Indians tend to be younger, with a mean age of 40 years compared to 46 years for the overall immigrant population. The majority (81%) of Indian immigrants fall within the 18-64 age group (Batalova & Hanna, 2020). Indian immigrants are highly educated, have higher incomes and also have lower poverty rates compared to the foreign and US-born populations (Batalova et al., 2021). Educational qualifications of Indian immigrants are also high compared to both US-born and overall foreign-born populations. When compared to the 33% of both US-born and all immigrants, 79% of Indians who are aged 25 and above have at least a bachelor's degree in 2019 (Batalova & Hanna, 2020). Indians were largely employed in business, management, science and arts occupations (Batalova & Hanna, 2020). In 2014, among the total immigrants from India to the US, 54% were from the Hindu community followed by Christians (18%) and Muslims (12%) (Pew Research Center).

Table.3.5

Top Three Countries of Destination of Indian Emigrants (2020).

Countries	No. of Emigrants (million)
UAE	3.5 million
US	2.7 million
Saudi Arabia	2.5 million

Source: UN Department of Economic and Social Affairs -2020.

With 3.5 million immigrants, the UAE is the most popular destination for Indians followed by the USA with 2.7 million immigrants and Saudi Arabia with 2.5 million immigrants. Since 2013, new arrivals from India and China have outpaced those from Mexico, making India the top country for immigrants in the United

States. Apart from these three countries, Australia, Canada, Kuwait, Oman, Qatar and the UK are some of the top destinations for Indian emigrants in the world (UN DESA-2020). In 2022, India emerged as the largest source of international migrants to OECD countries, constituting 15% of all new immigrants. The United States, the United Kingdom and Canada were the most popular OECD destinations for Indian migrants, collectively receiving over 60% of these immigrants (Education for All in India, 2023).

Money transfers from non-resident Indians (NRIs) employed abroad to family, friends, or other relations living in India are referred to as remittances to India. India is the leading recipient of remittances worldwide. The implication of the huge flow of remittances to the home country is its impact on the poverty level, saving and investment and household spending (Srivastava & Sasikumar, 2003; Prakash, 1998; Parida, 2015). It has positive impacts on the overall economic growth of India as a home country (Sreevastava & Sasikumar, 2003).

Table 3.6
Remittances to India in Different Fiscal Years since 1990.

Year	Remittances (US \$ Billion)
1990-1991	US \$ 2.10 Billion
1995-1996	US \$ 8.50 Billion
2000-2001	US \$ 12.85 Billion
2005-2006	US \$ 24.55 Billion
2009-2010	US \$ 55.06 Billion
2015-2016	US \$ 62.70 Billion
2019-2020	US \$ 83.00 Billion
2020-2021	US \$ 89.00 Billion

Source: World Bank Report, 2021

In 2018, 2.9 % of India's GDP was contributed by foreign remittances (World Bank 2019). Table 3.6 shows that the total remittances received by India in the fiscal year 2020-2021 are US \$ 89 billion as against US \$ 2.10 billion in the

financial year 1990-1991. Indian migrants are scattered all over the world and have the world's largest diaspora population (UN, 2020).

Table.3.7
Country-Wise Share of Inward Remittances to India (2021).

Rank	Source Countries	Share in total remittances
1	USA	23.4%
2	UAE	18%
3	UK	6.8%
4	Singapore	5.7%
5	Saudi Arabia	5.1%

Source: RBI Remittances Survey, 2021.

The top countries (Top five) sending the highest remittances to India are the USA, UAE, UK, Singapore and Saudi Arabia (See Table 3.7). The RBI Remittances report of 2021 shows that the share of the USA in total remittances to India is 23.4% followed by UAE (18%), UK (6.8%), Singapore (5.7%) and Saudi Arabia (5.1%). This emphasises the significant role of the USA in the remittance inflows for Indian migrants.

Table.3.8
Changes in the Immigrant Population in the US from the Top Three Origin Countries (1980-2019).

Year	Mexico	% Change	China	% Change	India	% Change
1980	2,199,000	-	366,000	-	206,000	-
1990	4,298,000	48	677,000	46	450,000	54
2000	9,177,000	53	1,192,000	43	1,023,000	56
2010	11,711,000	21	1,808,000	34	1,780,000	42
2019	10,932,000	-7	-	-	2,688,000	33

Source: Data from US Census Bureau, 2010 and 2019. American Community Survey (ACS)

In 2018, the Mexican population constituted the majority of the USA's total immigrant population with 25% of immigrants being from Mexico followed by China (6%) and India (6%). Examining the top three origin countries of new

immigrants to the US in 2018, China topped the list with 149000 people followed by India (129,000) and Mexico (120,000) (ACS, 2019). According to data from the US Census Bureau and the American Community Survey (ACS), in 2019, approximately 2.7 million Indian immigrants were residing in the US.

Table 3.8 shows that there was a tenfold increase in the number of Indian immigrants in the USA from 206000 in 1980 to 2688000 in 2019 (Data from US Census Bureau 2010 and 2019 ACS). Among the total US foreign-born population, Indian immigrants accounted for approximately 6%. Despite an increase in the total number of Indian immigrants in the US, the immigration policies implemented by the US after 2016 have led to a reduction in the rate of immigration from India. The rate of increase was only 11% during 2015-2019, contrasting sharply with the 54% increase observed during 1980-1990 (ACS, 2019). Data indicates a declining trend in the percentage change of immigrants in the US from the top three origin countries: Mexico, China and India.

Table.3.9

Number of Indian Students in the US since Independence.

Year	No. of Indian Students	Share	Percentage Change
1949-50	1400	5.1	-
1979-80	9000	3.1	84
2006	76,500	-	88
2010-11	103,260	-	25
2017-18	196,271	-	47
2019-20	193,124	18.0	-1.6

Source: IIE, “All Places of Origin: International Students Data from the 2020 Open Doors Report”, accessed January 11, 2021.

The US is considered as the top destination for foreign students (Open Door Report (ODR)), because of its quality of education, value in the labour market and ease of getting a job after graduation. Indian students are considered the second highest percentage of total international students in the USA (Open Door Report 2020).

Table 3.9 shows that there is a marked decrease of 3147 Indian students in the USA in 2019-20 when compared to 2017-18. The growth rate shows a negative trend (-1.6%) during 2017-18 and 2019-20. Trump's restrictive immigration policies created a negative atmosphere in the USA, especially for student immigrants. The notable reasons for this declining trend are the increasing cost of education in the USA, the unfavorable environment for immigrants due to the strict immigration policies under the Trump administration and increasing opportunities to study in other countries like New Zealand and Germany (ODR-2020).

3.4. H-1B Visa.

The H-1B visa is a non-immigrant visa that allows US companies to employ foreign workers in specialty occupations that require theoretical or technical expertise. Professionals who are commonly eligible for H-1B visas include those in fields such as information technology, engineering, medicine and education. The visa is typically granted for an initial period of up to three years, which can be extended to a maximum of six years. The H-1B visa program is capped annually with a limited number of visas available each fiscal year. H-1B visa holders with a Green Card are allowed to stay in the USA for a long period. The Trump administration paused the issuance of H-1B visas due to concerns that American workers would be replaced by foreign workers.

Table.3.10

H-1B Visas Issued Per Annum (1990-2019).

Fiscal Year	H-1B Visa Issued Per Year	Percentage Change
1990	794	-
2000	133,290	99
2010	117,828	-13
2015	173,799	32
2016	181,351	4.16
2017	180,440	-0.50
2019	188,100	4.07

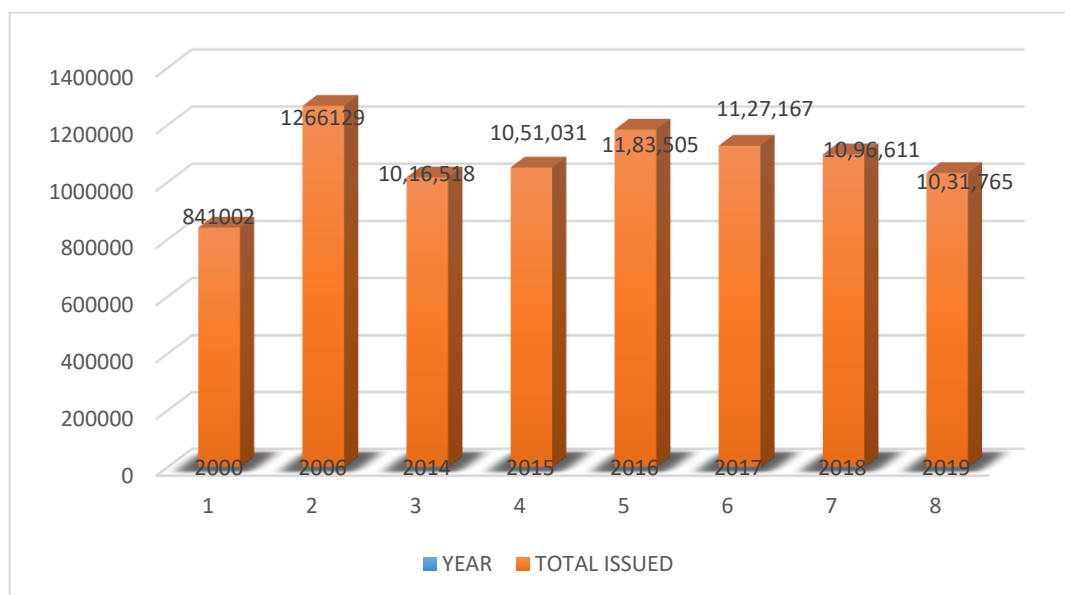
Source: Bureau of Consular Affairs. US Department of State. May-2, 2018

The number of H-1B visas issued in 1990 was 794 and it increased to 181351 in 2016. However, the situation changed after 2016 and in 2017, it decreased to 180440. According to the recent record of US Citizenship and Immigration Services (USCIS), the total number of foreigners working in the US on H-1B visas was 419637 in the 2018 fiscal year with 309986 Indians. This means nearly three out of every four H-1B visa holders are Indian citizens, accounting for about 73.9% of the total H-1B visa holders in the USA. During the Trump administration, the denial rate for H-1B visas increased from 6% in 2015 to 30% in 2020 (National Foundation for American Policy).

3.5. Green Card.

A green card or permanent resident card allows a person to stay permanently in the USA. Green Card holders are normally eligible to apply for US citizenship. Every year the US Government issues more than 1 million green cards and most of them are a mere renewal of the existing green card holders and to the family members of US citizens. There are different types of green cards like family-based Green Card, Employment-based Green Card, humanitarian-based Green Card, Diversity lottery Green Card, longtime resident Green Card and other Green Card.

Figure 3.1
Annual Number of Green Card Issued (2000-2019)



Source: Department of Homeland Security's Yearbook of Immigration Statistics 2019.

Figure 3.1 shows the annual green cards issued in the US during 2000-2019. The number of people who obtained green cards in 2000 was 841002 and it increased to 1266129 in 2006. However, the number decreased in 2017, 2018 and 2019 due to the tight immigration policies adopted by the Trump administration. In 2016, there was a 16.42% increase in the issuance of green cards compared to 2014. However, in 2018 and 2019, there was a serious declining trend in the issuance of green cards.

Table .3.11
Green Card Issued to Indians in the US (2014-2019).

Year	Issued to India	Percentage Change	Total Issued
2014	77,908	-	1,016,518
2015	64,116	-17.70	1,051,031
2016	64,687	0.89	1,183,505
2017	60,394	-6.63	1,127,167
2018	59,821	-0.94	1,096,611
2019	54,495	-8.90	1,031,765

Source: US Department of Homeland Security.

Table 3.11 shows the number of green cards issued to Indians before and during the Trump administration. The data reveals a declining trend in the issuance of permanent residence cards to Indians with 54495 green cards issued in 2019 compared to 77908 in 2014. There was a negative growth rate of -8.90% in green card issuance during 2018-19. Overall, this indicates that under the Trump administration, there was a reduction in the growth of immigration, student visa issuances, H-1B visa approvals and green card grants.

3.6. Emigration from Kerala.

Kerala is recognised as a hub of migration and the importance of international migration and remittance transfers to the state is widely acknowledged. Before 1970 the emigration from Kerala was mainly internal but a minimal number of external migrations also took place especially from the educated people (Zachariah et al., 1999). During this period the number of Muslim emigrations was negligible. The oil boom witnessed by the Persian Gulf in 1973 motivated the oil exporting countries in that region to absorb more labourers from outside to bridge

the labour shortage. It created a situation where manpower export was greater than the commodity export in the middle of the 1970s (Shibinu,2021). After that, Kerala witnessed a large-scale emigration of skilled, semi-skilled and unskilled workers to the GCC countries. As per the KMS 2018, the number of Keralites living and working abroad is 2121887 and it is 2.87 lakh less than in 2013 (Rajan and Zachariah, 2018). In 2018, the percentage of Kerala people residing in UAE, Saudi Arabia and the USA are 39.1%, 23% and 2.2% respectively.

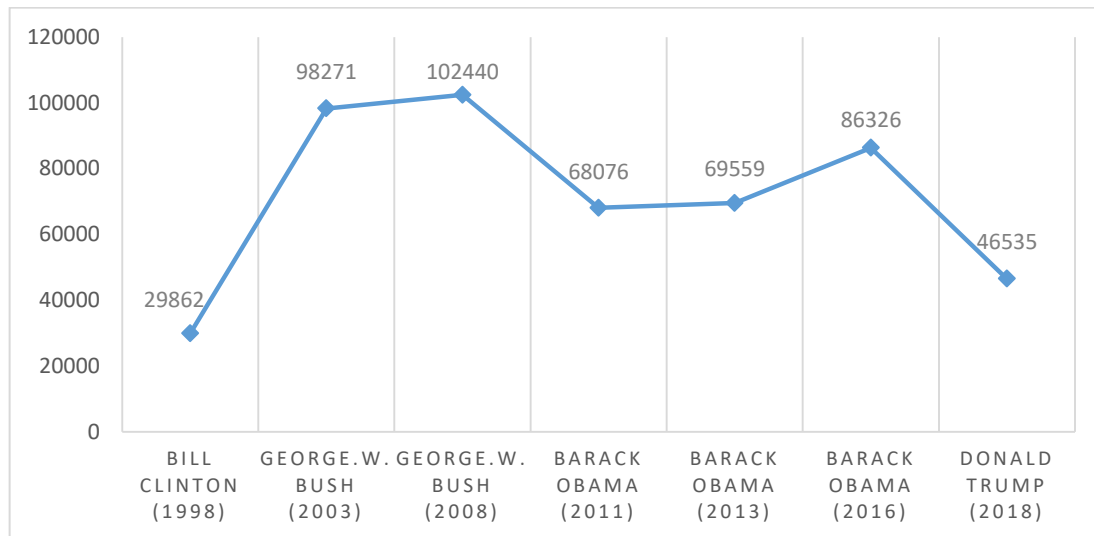
Table 3.12
Country of Residence of Emigrants from Kerala (1998-2018).

Destination	Percentage						
	2018	2016	2013	2011	2008	2003	1998
UAE	39.1	41.5	37.5	38.7	41.9	36.5	31.0
Saudi Arabia	23.0	22.5	21.8	25.2	23.0	26.7	37.5
Oman	8.6	7.6	7.9	8.6	7.6	8.3	10.2
Kuwait	6.0	5.5	7.6	5.6	5.9	6.2	5.0
Bahrain	3.8	3.8	6.2	4.5	4.6	5.9	5.5
Qatar	8.7	8.4	4.4	6.5	5.5	5.4	4.6
Other West Asia	0.0	0.3	0.9	0.3	0.0	0.1	0.0
USA	2.2	3.8	2.9	3.0	4.7	5.3	2.2
Canada	0.7	1.2	0.5	0.4	0.6	0.3	0.0
United Kingdom	1.8	1.5	1.6	2.0	1.8	1.2	0.0
Other Europe	0.0	0.4	0.8	0.5	0.4	0.8	0.0
Africa	0.3	0.5	0.6	0.6	0.6	0.9	0.0
Singapore	0.6	0.5	0.4	0.5	0.5	0.8	0.0
Maldives	0.3	0.2	0.1	0.3	0.3	0.7	0.0
Malaysia	0.5	0.3	0.4	0.6	0.5	0.3	0.0
Other SE Asia	0.0	0.6	2.2	0.7	0.4	0.4	0.4
Australia/ New Zealand	1.4	0.7	1.6	1.1	1.0	0.3	0.0
Other Countries	1.2	0.7	2.6	1.1	0.6	0.0	4.0

Source: Kerala Migration Survey, 2018

When considering emigration to non-Gulf regions, the percentage of emigration from Kerala to the USA remains significantly higher at 2.2%. Notably, this figure stood at 3.8% in 2016 before witnessing a decline in 2018. The decline may be attributed to the aftermath of the newly elected administration in the US, prompting individuals to explore migration options in other countries such as Canada, the UK, Australia, and New Zealand (Das, 2023). However, migration from Kerala to the US remains comparatively higher when compared to other non-Gulf countries. Migrants contribute significantly to the economy by sending a substantial amount of money back, which is considered the backbone of Kerala's economy. In 2018, Kerala received a total remittance of 30,717 crores, compared to 3,530 crores in 1998 (Das, 2023). Table 3.13 illustrates the country of residence of emigrants from Kerala between 1998 and 2018.

The United States has long been seen as a promising destination for educated and skilled workers from both India and Kerala, offering opportunities for quality higher education and professional growth. However, the emigration landscape underwent significant changes during the administration of former US President Donald Trump. His presidency aimed to overhaul immigration policies, focusing on curbing illegal immigration and reshaping legal immigration channels. Trump's initiatives included constructing a border wall with Mexico, implementing travel bans on selected Muslim-majority countries and challenging programs like the Deferred Action for Childhood Arrivals (DACA). These reforms reflected a shift towards stricter immigration enforcement and a preference for skilled immigrants under the slogan of 'Buy American, Hire American.' Consequently, the US saw a decline in certain immigration categories, impacting countries like India and regions like Kerala, known for sending skilled migrants abroad. Figure 3.2 shows the trends in emigration from Kerala to the US in different presidential administrations.

Figure.3.2**Emigration from Kerala to the US: Trends by US Presidential Administration (1998-2018).**

Source: Kerala Migration Survey, 2018

Figure (3.2) presents the total number of emigrants from Kerala to the United States during different periods corresponding to various US presidential administrations. The data indicates fluctuations in emigration numbers over time, reflecting changes in policies, economic conditions and other factors influencing migration trends. During the Bill Clinton administration in 1998, the number of emigrants from Kerala to the US stood at 29862. This figure increased substantially during the George W. Bush administration, reaching its peak at 102440 in 2008. However, emigration numbers experienced a decline during the subsequent years of the Barack Obama administration, with the lowest recorded figure being 46535 in 2018 during the Donald Trump administration.

The Trump administration's approach to immigration stood in stark contrast to that of the preceding Obama administration, with a focus on border security and restrictive measures targeting immigrants. This included restrictions on visas such as H-1B visas, green cards and student visas. As a result, emigration from India, as well as Kerala, witnessed declines, reflecting the changing migration landscape to the US post-2016.

3.7. Conclusion.

Immigration to the United States from various parts of the globe is a continuing phenomenon, marked by fluctuating patterns shaped by the changing immigration policies of different eras. In the context of India and Kerala, the immigration policies of the USA hold considerable significance. Kerala, known for its high emigration rates, felt the effects of the Trump administration's policies, which contributed to a decline in emigration to the US. Despite the decline observed in recent years, emigration to the US remains comparatively higher than to other non-Gulf countries, highlighting the enduring appeal of American opportunities for educated and skilled individuals from Kerala (Rajan & Zachariah, 2018). This trend emphasises Kerala's strong ties to the US, as evidenced by the substantial remittance inflows that serve as a backbone of the state's economy.

However, the immigration picture took a significant change with the election of Joe Biden, whose administration adopted a more immigrant-friendly approach. Biden's policies aimed to reverse many of the Trump administration's measures, recognising the contributions of immigrants to the US economy. This shift in policy positively influenced emigration trends, particularly from India and Kerala. Biden proposed revisions to policies such as the Deferred Action for Childhood Arrivals (DACA) program. Additionally, Biden's administration emphasised border security measures while promoting legal immigration pathways and offering a corridor to permanent residency for certain undocumented immigrants, including a significant number of immigrants living in the US illegally. However, with the shift in policy under the Biden administration, there is renewed optimism for migrants, including those from Kerala, as opportunities for legal immigration and pathways to citizenship are enhanced.

The forthcoming chapter will explore a comprehensive analysis that focuses on the socio-economic characteristics of migrants and non-migrants.

SOCIO-ECONOMIC CHARACTERISTICS OF MIGRANTS AND NON-MIGRANTS

-
- *Introduction.*
 - *Analysis of Socio-Economic Characteristics of Migrants.*
 - *Analysis of Socio-Economic Characteristics of Non-Migrants.*
 - *Conclusion.*
-

4.1. Introduction.

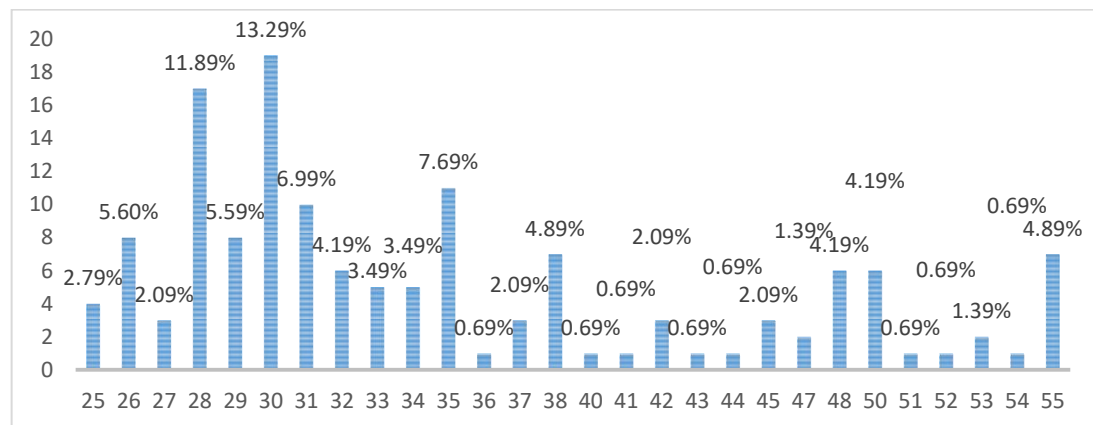
This chapter discusses the socio-economic characteristics of both migrants and non-migrants. The first part of this chapter presents the characteristics of migrants and the second part covers the characteristics of non-migrants. To explore the characteristics of migrants, various factors such as age, sex, religion, marital status, education, occupation, status of citizenship and location are considered. Moreover, the characteristics of non-migrants such as age, sex, religion, marital status, education and occupation also taken into account. A descriptive mode of analysis is employed to examine the characteristics of both migrants and non-migrants.

4.2. Analysis of Socio-Economic Characteristics of Migrants.

In this section, the researcher conducts a systematic analysis of the various characteristics of migrants.

Figure.4.1

Age Distribution of the Emigrants



Source: Primary Survey, 2023

The age-wise classification of emigrants reveals a diverse distribution with the most common age being 30 (13.29%) and age groups 28 and 35 also show notable frequencies at 11.89% and 7.69% respectively. Figure (4.1) displays that younger age groups have higher emigrant counts. The result also shows that age groups such as 36, 40, 41, 43, 44 and 51 have negligible representation.

The age-wise distribution of emigrants particularly concentrated in their late 20s and early 30s, carries several economic implications. This pattern suggests potential contributions made by the emigrants to the labour market in the destination country and influences the workforce dynamics through enhanced labour productivity. Remittances from this younger emigrant population may positively impact the income of the households and local businesses, which ultimately leads to the economic well-being of the origin country. The age distribution also hints at a potential skill drain, affecting the expertise available in the home country. Moreover, the demographic structure also influences the dependency ratio which is considered a serious economic challenge to our economy.

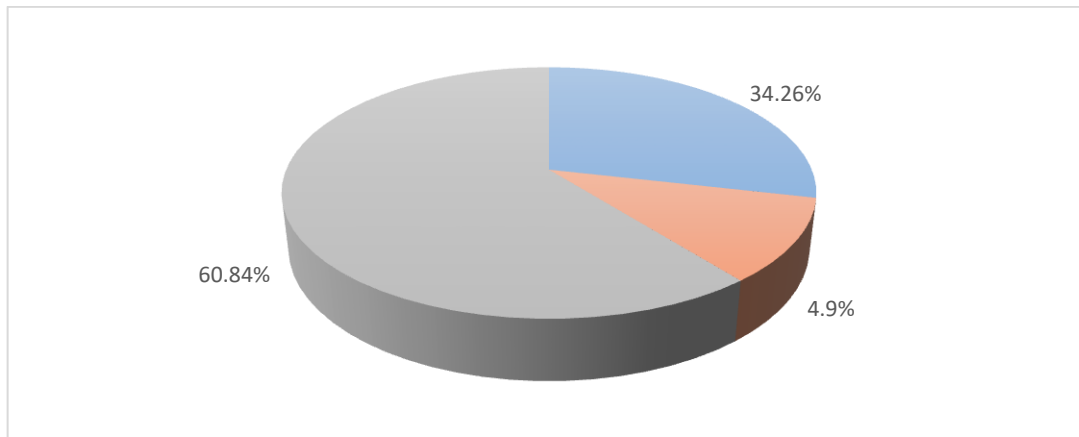
Table.4.1
Gender-Wise Distribution of the Emigrants.

Sex	Freq.	Per cent.
Male	121	84.62
Female	22	15.38
Total	143	100

Source: Primary Survey, 2023

Table 4.1 shows a significant gender imbalance among the emigrant population where males constitute the majority with 121 individuals (84.62%) and females comprise comparatively a smaller portion accounting for 15.38%. This substantial difference suggests that the migration pattern is primarily male-dominated which causes imbalances in the labour force participation in Kerala. Accordingly, this could lead to changes in family structures and responsibilities indicating that in the absence of male members at home, women are further regressed towards taking up traditional domestic roles. Addressing such implications may require policies and interventions to create local employment opportunities to retain potential male emigrants.

Figure.4.2
Religious Composition of the Emigrants



Source: Primary Survey, 2023

Figure 4.2 shows that Christians represent the majority with 60.84%, Hindus form the second-largest religious group comprising 34.26% and Muslims constitute a smaller proportion with 4.9%. This distribution reflects the predominance of Christians and Hindus in the emigration process. The notable thing is that the emigration of the Muslim community is relatively smaller compared to the other two religious groups. The possible reasons for the dominance of Christians in the process of emigration may be the establishment of social networks, the acquisition of specific education suitable for the US labour market, job opportunities in sectors with ties to Christian communities and opportunities in the destination country.

Table.4.2
Marital Status of the Emigrants.

Marital Status	Freq.	Per cent.
Unmarried	47	32.87
Married	94	65.73
Widow/Widower	1	0.7
Divorced	1	0.7
Total	143	100

Source: Primary Survey, 2023

Table 4.2 reveals marital composition within the emigrant population. The majority of emigrants are married, constituting 65.73% and unmarried individuals represent only 32.87% of the emigrant population. Further, there is a minimal representation of widow/widower and divorced individuals, each accounting for 0.7%. This trend often leads to family separation, with spouses and children left behind in Kerala while one partner migrates, resulting in emotional strains and challenges. Married migrants may also face increased pressure to succeed economically in the US and send remittances regularly to support the livelihoods of their families in Kerala, impacting both local economies and development initiatives.

Table.4.3

Educational Status of the Emigrants.

Education	Freq.	Per cent.
Degree	35	24.48
PG	91	63.63
Technical Education	16	11.19
Others	1	0.70
Total	143	100

Source: Primary Survey, 2023

Table 4.3 reveals the educational background of the emigrant population. The majority of emigrants hold postgraduate (PG) qualifications with 63.63% and Individuals with undergraduate degrees account for 24.48%. This is followed by those holding technical qualifications (11.19%) and other educational backgrounds (0.70%). This distribution emphasises a high prevalence of highly educated individuals, mostly those with postgraduate qualifications in the emigrant unit. The dominance of postgraduate degree holders among the emigrant population suggests that higher education significantly influences emigration. This trend indicates that individuals with advanced qualifications are more likely to seek opportunities abroad, possibly due to better job prospects, higher salaries and improved living standards. Consequently, the high proportion of postgraduate emigrants implies a

brain drain, where the home country loses highly educated individuals, which could impact the local economy by reducing the availability of skilled professionals. This trend could also affect local industries and development initiatives adversely. This can have economic implications for the homeland, suggesting the need for investment in technical and vocational education to retain the potential of its people and meet local industry demands.

Table.4.4
Occupational Profile of the Emigrants.

Occupation	Freq.	Per cent.
Accountant	14	9.80
Anesthesia Technician	3	2.10
Animal Nutritionist	2	1.40
Business	4	2.80
Company Lawyer	2	1.40
Doctor	2	1.40
Engineer	7	4.89
Hospital Assistant	2	1.40
Lab Technician	10	6.99
Legal Advisor	4	2.80
Managing Staff	2	1.40
Mechanic	3	2.10
Microbiologist	7	4.89
Nurse	19	13.28
Therapist	3	2.10
Pharmacist	6	4.19
Quality Controller	2	1.40
Software Engineer	9	6.29
Supervisor	2	1.40
System Analyst	3	2.10
Others	37	25.87
Total	143	100

Source: Primary Survey, 2023

Table 4.4 reveals the distribution of migrants based on their occupations, indicating varied representation across different professions. Nurses emerge as the leading occupation among migrants with 13.28% of the total followed by accountants at 9.80% and lab technicians at 6.99%. However, there are notable disparities in the representation across professions with some occupations having minimal presence, such as animal nutritionist, company lawyer, doctor, hospital assistant, managing staff, quality controller and supervisor, each individually accounting for less than 2% of the total. The data also show that 25.87% of individuals are engaged in other occupations such as chemist, physiotherapist, designer, drilling engineer, social worker, project assistant, etc...The dominance of certain occupations like nursing, lab technicians and pharmacists suggests a potential demand for healthcare professionals in the destination country. However, the limited representation in other fields might indicate either a lack of demand or stricter barriers to entry for migrants in those professions. These findings suggest that the composition of the emigrant workforce is concentrated in key sectors such as healthcare, engineering, management and business professions. This emigration trend may adversely affect the availability of the same professionals within the state, possibly leading to shortages of skilled healthcare, engineering, management and business professionals within the domestic economy.

Table.4.5
Citizenship Status of the Emigrants.

Citizenship	Freq.	Per cent.
Yes	37	25.87
No	106	74.13
Total	143	100

Source: Primary Survey, 2023

Table 4.5 shows the status of citizenship acquired by the emigrants. Out of the total emigrants, 74.13% have not acquired US citizenship, while 25.87% have obtained US citizenship. The acquisition of citizenship by migrants may enhance the brain drain process and thus it adversely affects the economy of Kerala. The reasons

behind this include the loss of skilled individuals, negative economic impacts such as decreased productivity and innovation, demographic challenges like population aging, loss of return on educational investments and so on. Local economic and professional development may be hindered through such kinds of citizenship.

The small percentage of emigrants without citizenship could imply a variety of things, such as retaining cultural connections, planning to return to Kerala eventually, or facing barriers to obtaining citizenship such as legal or procedural challenges. Those who have not acquired US citizenship may have a higher propensity to send remittances as they might plan to return eventually. Remittances can be crucial for economic development in the home country, contributing to household income, education, healthcare and small businesses. Policymakers in the home country might need to create supportive environments for returning emigrants who have acquired foreign citizenship, encouraging them to invest and contribute to the economy. This can include offering incentives for business startups, ensuring property rights and providing tax benefits.

Table.4.6
City-Wise Distribution of the Emigrants in the US.

City	Freq.	Per cent.
Alabama	2	1.4
Arizona	1	0.7
California	30	20.98
Colorado	1	0.7
Florida	14	9.79
Georgia	32	22.38
Los Angeles	8	5.59
Maryland	4	2.8
New Jersey	8	5.59
New York	20	13.99
South Carolina	4	2.8
Texas	3	2.1
Virginia	1	0.7
Washington	15	10.49
Total	143	100

Source: Primary Survey, 2023

Table 4.6 shows the city-wise distribution of emigrants in the US. Data show that Georgia has the highest representation with 22.38% followed by California with 20.98%, New York with 13.99%, Washington with 10.49% and Florida with 9.79%. These concentrations suggest distinct migration trends and are influenced by factors such as job opportunities, community networks, better living conditions and regional preferences in the destination country.

Table.4.7**Gender-Wise Educational Status of the Emigrants.**

Sex	Education				Total
	Degree	PG	Technical Education	Others	
Male	29	76	15	1	121
	(82.85%)	(83.52%)	(93.75%)	(100%)	(84.62%)
Female	6	15	1	0	22
	(17.15%)	(16.48%)	(6.25%)	(0%)	(15.38%)
Total	35	91	16	1	143
	(100%)	(100%)	(100%)	(100%)	(100%)

Source: Primary Survey, 2023

Table 4.7 shows the cross-tabulation result of sex and education, it reveals a distinct pattern in the educational qualifications of male and female emigrants. Among PG holders, male dominance is observed at 83.52%, while females account for 16.48%. Similarly, among total technical degree holders, a similar pattern is observed, with males comprising 93.75% and females 6.25%. Males also outnumber females in bachelor degree attainment with 82.85% of total bachelor degree holders compared to females, who represent 17.15% of total degree holders. Thus, the given data show gender disparities in educational profiles among emigrants. The high percentage of males with technical education suggests a significant male presence in technically skilled jobs at the country of destination, which may critically affect sectors like IT, engineering and healthcare in the homeland. Similarly, a substantial proportion of both male (83.52%) and female (16.48%) emigrants hold postgraduate degrees, reflecting that higher education significantly influences migration.

Table.4.8
Gender-Wise Occupational Profile of the Emigrants.

Occupation	Gender				Total
	Male		Female		
	Freq.	Per cent.	Freq.	Per cent.	
Accountant	10	71.42	4	28.58	14
Anesthesia Technician	3	100.00	0	0.00	3
Animal Nutritionist	2	100.00	0	0.00	2
Business	4	100.00	0	0.00	4
Company Lawyer	2	100.00	0	0.00	2
Doctor	2	100.00	0	0.00	2
Engineer	7	100.00	0	0.00	7
Hospital Assistant	0	0.00	2	100.00	2
Lab Technician	8	80.00	2	20.00	10
Legal Advisor	4	100.00	0	0.00	4
Managing Staff	2	100.00	0	0.00	2
Mechanic	3	100.00	0	0.00	3
Microbiologist	5	71.42	2	28.58	7
Nurse	13	68.42	6	31.58	19
Therapist	2	66.66	1	33.34	3
Pharmacist	5	83.33	1	16.67	6
Quality Controller	2	100.00	0	0.00	2
Software Engineer	6	66.66	3	33.34	9
Supervisor	2	100.00	0	0.00	2
System Analyst	3	100.00	0	0.00	3
Others	36	97.29	1	2.71	37
Total	121	84.62	22	15.38	143

Source: Primary Survey, 2023

Table 4.8 reveals clear gender disparities across various migrant occupations. For instance, professions like anesthesia technician, animal nutritionist, business, company lawyer, doctor, engineer, legal advisor, managing staff, mechanic, quality controller, supervisor and system analyst are entirely male-dominated, with males representing 100% of the workforce. Conversely, jobs like hospital assistants are exclusively female-centric. In occupations such as accountants and nurses, males constitute 71.42% and 68.42% of the workforce respectively, while females make up 28.58% and 31.58% respectively. This distribution indicates a significant male majority but not overwhelmingly so. These outcomes show reliable disparities in certain fields, suggesting inequalities in opportunities or preferences, possibly influenced by societal and cultural factors shaping career choices.

Table.4.9
Religious-Wise Occupational Profile of the Emigrants.

Occupation	Religion						Total
	Hindus		Christians		Muslims		
	Freq.	Per cent.	Freq.	Per cent.	Freq.	Per cent.	
Accountant	2	14.29	11	78.57	1	7.15	14
Anesthesia Technician	0	0.00	3	100.00	0	0.00	3
Animal Nutritionist	0	0.00	2	100.00	0	0.00	2
Business	1	25.00	3	75.00	0	0.00	4
Company Lawyer	2	100.00	0	0.00	0	0.00	2
Doctor	1	50.00	1	50.00	0	0.00	2
Engineer	2	28.57	5	71.43	0	0.00	7
Hospital Assistant	2	100.00	0	0.00	0	0.00	2
Lab Technician	4	40.00	5	50.00	1	10.00	10
Legal Advisor	0	0.00	4	100.00	0	0.00	4
Managing Staff	1	50.00	1	50.00	0	0.00	2
Mechanic	1	33.34	2	66.66	0	0.00	3
Microbiologist	1	14.28	6	85.71	0	0.00	7
Nurse	10	52.63	8	42.10	1	5.27	19
Therapist	0	0.00	2	66.66	1	33.34	3
Pharmacist	2	33.34	4	66.66	0	0.00	6
Quality Controller	0	0.00	0	0.00	2	100.00	2
Software Engineer	1	11.12	7	77.78	1	11.12	9
Supervisor	2	100.00	0	0.00	0	0.00	2
System Analyst	0	0.00	3	100.00	0	0.00	3
Others	17	45.95	20	54.05	0	0.00	37
Total	49	34.26	87	60.84	7	4.90	143

Source: Primary Survey, 2023

Table 4.9 shows religious distribution among migrants across different occupations. Christians emerge as the most prevalent group constituting 60.84% of the migrant population followed by Hindus at 34.26% and Muslims at 4.90%. Each occupation exhibits its religious composition. For instance, professions like anesthesia technicians, animal nutritionists, legal advisors, system analysts, accountants and software engineers are predominantly occupied by Christians, whereas Hindus are more prevalent in occupations such as company lawyers, hospital assistants, supervisors and nurses. Muslims on the other hand have a lesser presence overall, with minimal representation in many professions. Overall results suggest the dominance of the Christian community in almost all occupations. These variations could stem from individual preferences as well as broader societal

influences, including cultural norms and historical backgrounds. The presence of established networks and communities within certain religious groups can also play a role in employment opportunities. For instance, in the United States, there are often well-established networks and support systems within certain religious communities that can facilitate job searching and networking. These networks may provide valuable resources, such as job listings, career advice and networking opportunities, which can be particularly beneficial for migrants seeking employment within their respective religious communities.

Table.4.10**Education-Wise Occupational Profile of the Emigrants.**

Occupation	Education								Total
	Degree		PG		Technical Education		Other		
	Freq.	Per cent.	Freq.	Per cent.	Freq.	Per cent.	Freq.	Per cent.	
Accountant	6	42.85	8	57.15	0	0.00	0	0.00	14
Anesthesia Technician	0	0.00	2	66.66	1	33.34	0	0.00	3
Animal Nutritionist	0	0.00	2	100.00	0	0.00	0	0.00	2
Business	0	0.00	4	100.00	0	0.00	0	0.00	4
Company Lawyer	0	0.00	2	100.00	0	0.00	0	0.00	2
Doctor	0	0.00	2	100.00	0	0.00	0	0.00	2
Engineer	0	0.00	4	57.14	3	42.86	0	0.00	7
Hospital Assistant	0	0.00	2	100.00	0	0.00	0	0.00	2
Lab Technician	0	0.00	6	60.00	4	40.00	0	0.00	10
Legal Advisor	0	0.00	4	100.00	0	0.00	0	0.00	4
Managing Staff	1	50.00	1	50.00	0	0.00	0	0.00	2
Mechanic	1	33.34	0	0.00	2	66.66	0	0.00	3
Microbiologist	0	0.00	7	100.00	0	0.00	0	0.00	7
Nurse	13	68.42	6	31.58	0	0.00	0	0.00	19
Therapist	1	33.34	2	66.66	0	0.00	0	0.00	3
Pharmacist	1	16.66	5	83.34	0	0.00	0	0.00	6
Quality Controller	0	0.00	2	100.00	0	0.00	0	0.00	2
Software Engineer	0	0.00	9	100.00	0	0.00	0	0.00	9
Supervisor	1	50.00	1	50.00	0	0.00	0	0.00	2
System Analyst	0	0.00	0	0.00	3	100.00	0	0.00	3
Others	11	29.73	22	59.46	3	8.11	1	2.70	37
Total	35	24.48	91	63.63	16	11.19	1	0.70	143

Source: Primary Survey, 2023

Table 4.10 classifies migrants based on their occupations and educational backgrounds. Occupations such as animal nutritionist, business, company lawyer, doctor, hospital assistant, legal advisor, microbiologist, quality controller and

software engineer are mainly occupied by individuals with postgraduate degree qualifications. Similarly, those who are working in the nursing profession have a degree qualification. However, there are instances where individuals possess higher educational qualifications than what is typically required for their occupation. For example, within the nursing profession, a significant proportion of nurses hold degrees (68.42%) and postgraduate qualifications (31.58%). A similar trend is observed in occupations like accountants, lab technicians, microbiologists, pharmacists, etc... This mismatch between education and occupation suggests the prevalence of underemployment among migrants in the US. Underemployment occurs when individuals are employed in positions that do not fully utilise their skills, qualifications, or experience. In this scenario, migrants with higher educational qualifications may find themselves in lower-skilled positions that do not align with their level of education. In the context of migration, this phenomenon is also known as 'brain waste' where an individual is employed in a job that requires a lower skill level than they possess, resulting in the underutilisation of their skills (Reitz, 2001).

Table 4.11 illustrates the distribution of migrants in the US based on their occupation and citizenship status. Notably, occupations such as legal advisor and system analyst are entirely occupied by migrants who have obtained citizenship, representing 100% in those fields. On the other hand, professions like anesthesia technician, animal nutritionist, company lawyer, hospital assistant, therapist, quality controller, software engineer, supervisor and pharmacist are exclusively filled by migrants who have not acquired citizenship, reflecting a 100% non-citizenship rate. In contrast, occupations like accountant, nurse, mechanic and lab technician exhibit a mixed composition with either citizenship obtained or not. For instance, while 15.79% of nurses are citizens, the majority (84.21%) are non-citizens. Similarly, occupations such as business and engineering have a slightly higher proportion of individuals with citizenship compared to those without citizenship.

Table.4.11
Occupational Profile by Citizenship Status.

Occupation	Citizenship Status				Total
	Yes		No		
	Freq.	Per cent.	Freq.	Per cent.	
Accountant	2	14.28	12	85.72	14
Anesthesia Technician	0	0.00	3	100.00	3
Animal Nutritionist	0	0.00	2	100.00	2
Business	3	75.00	1	25.00	4
Company Lawyer	0	0.00	2	100.00	2
Doctor	1	50.00	1	50.00	2
Engineer	4	57.14	3	42.86	7
Hospital Assistant	0	0.00	2	100.00	2
Lab Technician	5	50.00	5	50.00	10
Legal Advisor	4	100.00	0	0.00	4
Managing Staff	0	0.00	2	100.00	2
Mechanic	1	33.34	2	66.66	3
Microbiologist	0	0.00	7	100.00	7
Nurse	3	15.79	16	84.21	19
Therapist	0	0.00	3	100.00	3
Pharmacist	0	0.00	6	100.00	6
Quality Controller	0	0.00	2	100.00	2
Software Engineer	0	0.00	9	100.00	9
Supervisor	0	0.00	2	100.00	2
System Analyst	3	100.00	0	0.00	3
Others	11	29.73	26	70.27	37
Total	37	25.87	106	74.13	143

Source: Primary Survey, 2023

4.3. Analysis of Socio-Economic Characteristics of Non-Migrants.

The second part of this chapter examines the socio-economic characteristics of non-migrants. To analyse it, both cross-tabulations and frequency tables are used based on age, sex, religion, marital status, education and occupation.

Table.4.12
Age Distribution of the Non-Migrants.

Age	Freq.	Per cent.
20-40	203	94.4
41-70	12	5.6
Total	215	100

Source: Primary Survey, 2023

Table 4.12 offers a detailed view of the age distribution of non-migrants. Among the non-migrants, the largest group falls within the age category of 20 to 40, comprising 94.4%. Similarly, the number of non-migrants coming under the age group of 41 to 70 is 5.6%. These findings suggest that a significant portion of non-migrants are likely to be in their younger to middle adulthood stages. Such a pattern suggests various factors at play like lack of different endowments and familial responsibilities, they might already be settled in stable jobs or pursuing career growth in their current location and community ties.

Table.4.13
Religious Composition of the Non-Migrants.

Religion	Freq.	Per cent.
Hindus	113	52.5
Christians	39	18.2
Muslims	63	29.3
Total	215	100

Source: Primary Survey, 2023

Table 4.13 presents a breakdown of non-migrants based on their religious composition. Among them, Hindus represent the dominant religious group with 52.5%; Christians constitute a smaller portion of the non-migrants, totaling 18.2% and Muslims make up 29.3% within the dataset. This distribution highlights the religious diversity among the non-migrants, with Hinduism being the predominant faith. It underlines the fact that the majority of the non-migrants belonged to the non-Christian community.

Table.4.14
Gender-Wise Distribution of the Non-Migrants.

Sex	Freq.	Per cent.
Male	169	78.6
Female	46	21.4
Total	215	100

Source: Primary Survey, 2023

Table 4.14 provides a clear depiction of the gender distribution among non-migrants, revealing notable differences between males and females within this group. The result shows that 78.6% of individuals identified as male non-migrants compared to 21.4% of females. From the table, it is evident that males constitute a significant majority within the studied group.

Table.4.15
Marital Status of the Non-Migrants.

Marital Status	Freq.	Per cent.
Unmarried	73	33.9
Married	139	64.7
Widow/Widower	2	0.9
Divorced	1	0.5
Total	215	100

Source: Primary Survey, 2023

Table 4.15 provides a broad overview of the marital status distribution among the non-migrants. The majority of individuals (64.7%) are married, which suggests that a significant portion of non-migrant people are likely to be in stable marital unions. On the other hand, unmarried non-migrants represent a notable portion with 33.9% indicating the moderate presence of single individuals within this population. The relatively small numbers of both widowed and divorced individuals among the non-migrants suggest the stability of marital relationships among the non-migrants.

Table.4.16
Educational Status of the Non-Migrants.

Education	Freq.	Per cent.
SSLC and Below	31	14.4
Plus Two/PDC	40	18.6
Degree	114	53.0
PG	30	14.0
Technical Education	0	0.0
Others	0	0.0
Total	215	100

Source: Primary Survey, 2023

Table 4.16 provides a picture of the educational qualifications of non-migrants in the study area. Among them, the majority (53%) have attained a degree-level education, reflecting a significant emphasis on higher education attainment within this group. This suggests a propensity towards pursuing advanced academic qualifications or professional degrees among the non-migrants. Apart from this, 18.6% of individuals have completed education up to the Plus Two/PDC level, signifying a substantial portion with secondary or pre-degree qualifications. Besides, 14.4% of individuals have educational backgrounds categorised as SSLC and below, reflecting varying levels of completion of secondary education or below. Interestingly, there are no individuals categorised under Technical or Other education levels. This result indicates a potential gap in specialised technical or alternative educational paths within the non-migrant groups. Hence, these findings highlight that the attainment of higher education alone is not a criterion for migration to the US. Along with education, proper financial support in the initial phase of migration and strong social networks also play crucial roles.

Table.4.17
Occupational Profile of the Non-Migrants.

Occupation	Freq.	Per cent.
Business	7	3.2
Sweeper	8	3.7
Cashier/ Accountant	12	5.6
Construction Work	18	8.3
Driver	5	2.3
Clerk	7	3.2
Engineer	2	0.9
Farmer	4	1.9
Mechanic	4	1.9
Rubber Tapping	31	14.5
Salesman	30	14.0
Security	6	2.8
Store Keeper	10	4.6
Tylor	6	2.8
Other Jobs	18	8.4
Unemployed	47	21.8
Total	215	100

Source: Primary Survey, 2023

Table 4.17 illustrates the occupational status among the non-migrants. The most prevalent occupation is rubber tapping, accounting for 14.5%. This reveals the ongoing significance of agricultural activities and rural livelihoods within the community. Salesmanship emerges as the second dominant occupation with 14%. Additionally, notable occupations include cashier or accountant (5.6%), construction work (8.3%) and storekeeping (4.6%), signifying diverse employment opportunities within both agricultural and retail sectors. The results also show that 8.4% of individuals are engaged in other jobs such as teaching, lab assistant, nursing, fish stall operation, internet cafe management, painting, etc...However, a substantial proportion of non-migrants (21.8%) are unemployed. This result suggests potential

challenges in accessing suitable employment opportunities within the local labour market. The distribution also includes individuals engaged in skilled employment such as Tylor and mechanics, emphasising the presence of specialised skills within the non-migrant population.

Table.4.18**Gender-Wise Educational Status of the Non-Migrants.**

Education	Gender		Total
	Male	Female	
SSLC and Below	26 (15.38%)	5 (10.87%)	31 (14.41%)
Plus Two/PDC	35 (20.71%)	5 (10.87%)	40 (18.60%)
Degree	88 (52.08%)	26 (56.52%)	114 (53.0%)
PG	20 (11.83%)	10 (21.74%)	30 (14.0%)
Total	169 (100%)	46 (100%)	215 (100%)

Source: Primary Survey, 2023

The cross-tabulation (Table. 4.18) provides a broad overview of the gender-wise educational attainment of non-migrants and it shows the interconnection between gender and education within the analysed group. Among the male non-migrants, the highest educational attainment is at the degree level with 52.08% of individuals, followed by Plus Two/PDC level with 20.71% and SSLC and below with 15.38%. This suggests a strong emphasis on higher education among the male non-migrants. While, female non-migrants show a similar trend but with lower numbers across all educational categories, signifying disparities in educational access or attainment between genders. Remarkably, there are 21.74% female non-migrants with postgraduate qualifications reflecting a smaller but notable proportion of highly educated women within this group.

Table.4.19
Gender-Wise Occupational Profile of the Non-Migrants.

Occupation	Gender					
	Male		Female		Total	
	Freq.	Per cent.	Freq.	Per cent.	Freq.	Per cent.
Business	5	2.95	2	4.35	7	3.25
Sweeper	6	3.55	2	4.35	8	3.72
Cashier/ Accountant	5	2.95	7	15.22	12	5.59
Construction Work	13	7.70	5	10.87	18	8.37
Driver	5	2.95	0	0.00	5	2.33
Clerk	5	2.95	2	4.35	7	3.25
Engineer	2	1.20	0	0.00	2	0.93
Farmer	4	2.37	0	0.00	4	1.86
Mechanic	4	2.37	0	0.00	4	1.86
Rubber Tapping	23	13.61	8	17.40	31	14.41
Salesman	26	15.39	4	8.70	30	13.96
Security	6	3.55	0	0.00	6	2.80
Store Keeper	8	4.74	2	4.35	10	4.65
Tylor	4	2.37	2	4.35	6	2.80
Other Jobs	15	8.87	3	6.51	18	8.37
Unemployed	38	22.48	9	19.55	47	21.85
Total	169	100%	46	100%	215	100%

Source: Primary Survey, 2023

The cross-tabulation (Table. 4.19) of occupations and sex among non-migrants shows the gender distribution within different occupational sectors. Among the male non-migrants, the most established occupations include salesmanship with 15.39% followed by tapping with 13.61% and other jobs (8.87%) such as teaching, lab assistant, nursing, fish stall, internet cafe, newsagent, etc... This suggests a dominance of males in occupations such as sales and manual labour, which may reflect traditional gender roles or employment patterns within the community. Conversely, female non-migrants are more represented in occupations such as

rubber tapping (17.40%) and cashier/accountant (15.22%) indicating their involvement in both clerical and agricultural sectors. A higher proportion of males belong to the unemployed category (22.48%) compared to females (19.55%), highlighting gender disparities in employment opportunities or labour force participation.

Table.4.20**Religious-Wise Occupational Profile of the Non-Migrants.**

Occupation	Religion							
	Hindus		Christians		Muslims		Total	
	Freq.	Per cent.	Freq.	Per cent.	Freq.	Per cent.	Freq.	Per cent.
Business	2	1.77	2	5.12	3	4.76	7	3.25
Sweeper	6	5.31	1	2.56	1	1.59	8	3.73
Cashier/ Accountant	6	5.31	1	2.56	5	7.94	12	5.58
Construction Work	7	6.19	7	17.95	4	6.35	18	8.37
Driver	3	2.65	0	0.00	2	3.17	5	2.32
Clerk	0	0.00	3	7.70	4	6.35	7	3.25
Engineer	2	1.77	0	0.00	0	0.00	2	0.94
Farmer	2	1.77	1	2.56	1	1.59	4	1.86
Mechanic	4	3.54	0	0.00	0	0.00	4	1.86
Rubber Tapping	17	15.04	13	33.33	1	1.59	31	14.41
Salesman	15	13.28	3	7.70	12	19.04	30	13.95
Security	0	0.00	0	0.00	6	9.53	6	2.80
Store Keeper	5	4.42	0	0.00	5	7.94	10	4.65
Tylor	1	0.89	2	5.12	3	4.76	6	2.80
Other Jobs	10	8.85	3	7.70	5	7.94	18	8.37
Unemployed	33	29.21	3	7.70	11	17.45	47	21.86
Total	113	100%	39	100%	63	100%	215	100%

Source: Primary Survey, 2023

Table 4.20 provides an overview of occupations among non-migrants based on religion. Among Hindu non-migrants, the most prevalent occupations include rubber tapping (15.04%), sales roles (13.28%) and other jobs (8.85%) such as teaching, lab assistant, nursing, fish stall attendant and internet cafe worker. This distribution indicates a diversified engagement in both agricultural and commercial activities by the Hindu communities. In contrast, Christian non-migrants are predominantly engaged in occupations such as rubber tapping (33.33%), construction work (17.95%) and other jobs (7.70%). This pattern highlights the

occurrence of low-privileged employment within certain segments of the Christian community, indicating disparities in job opportunities and socio-economic status. The result also shows that Muslim non-migrants are more concentrated in jobs like salesman (19.04%), security (9.53%) and construction work (6.35%). The results suggest changing occupational preferences and distributions among different religious groups. These distributions may be influenced by certain factors such as cultural norms, skill sets, or economic opportunities. Moreover, the higher proportion of unemployed individuals among Hindu non-migrants (29.21%) compared to Christians (7.70%) and Muslims (17.45%) shows discrepancies in access to employment opportunities or labour market participation across religious groups.

Table.4.21**Education-Wise Occupational Profile of the Non-Migrants.**

Occupation	Education									
	SSLC & Below		Plus Two/PDC		Degree		PG		Total	
	Freq.	Per cent.	Freq.	Per cent.	Freq.	Per cent	Freq.	Per cent	Freq.	Per cent
Business	1	3.22	1	2.5	3	2.64	2	6.67	7	3.25
Sweeper	1	3.22	1	2.5	6	5.26	0	0.00	8	3.73
Cashier/ Accountant	2	6.45	3	7.5	5	4.38	2	6.67	12	5.58
Construction Work	2	6.45	5	12.5	8	7.01	3	10.00	18	8.37
Driver	0	0.00	2	5.00	3	2.64	0	0.00	5	2.32
Clerk	0	0.00	1	2.5	5	4.38	1	3.33	7	3.25
Engineer	0	0.00	1	2.5	1	0.88	0	0.00	2	0.93
Farmer	0	0.00	0	0.00	2	1.75	2	6.67	4	1.86
Mechanic	0	0.00	0	0.00	4	3.51	0	0.00	4	1.86
Tapping	4	12.91	6	15.00	16	14.03	5	16.67	31	14.41
Salesman	2	6.45	8	20.00	18	15.79	2	6.67	30	13.96
Security	1	3.22	0	0.00	4	3.51	1	3.33	6	2.80
Store Keeper	3	9.69	1	2.5	5	4.38	1	3.33	10	4.65
Tylor	0	0.00	1	2.5	4	3.51	1	3.33	6	2.80
Other Jobs	1	3.22	3	7.5	10	8.78	4	13.33	18	8.37
Unemployed	14	45.17	7	17.5	20	17.55	6	20.00	47	21.86
Total	31	100%	40	100%	114	100%	30	100%	215	100%

Source: Primary Survey, 2023

Table 4.21 exhibits the relationship between occupation and education within the studied group. Individuals with degree-level education are primarily represented in occupations such as sales roles at 15.79%, rubber tapping at 14.03%, other jobs at 8.78% and construction work at 7.01%. Similarly, those with lower educational attainment, such as SSLC and below, are more prevalent in occupations like rubber tapping at 12.91% and cashier/accountant roles at 6.45%. Furthermore, the results show a significant proportion of unemployed individuals (21.86%) across all education levels. Moreover, individuals with postgraduate qualifications are also observed in various occupations such as rubber tapping (16.67%), and other professional roles (13.33%) such as teaching, lab assistant, nursing, internet cafe etc...These results indicate the low effectiveness of education in facilitating meaningful employment outcomes, underemployment and a limited capacity of the labour market to absorb workers in Kerala.

4.4. Conclusion.

This chapter examines the socio-economic characteristics of both migrants and non-migrants in Kerala. The first part presents the characteristics of migrants. The population shows diversity in terms of age with varying frequencies across different age groups and the exploration of gender distribution reveals males have the upper hand compared to females. The distribution of religious groups among emigrants displays that Christians make up the majority, followed by Hindus as the second-largest group and Muslims representing a smaller proportion of the total emigrant population. The cross-tabulation results show that there are differences in the trends of educational attainment among different occupations and postgraduate degrees are more prevalent in particular occupational groups. The religious wise occupation shows that Christians dominate some of the professions, while Hindus are concentrated in roles such as company lawyers and nurses. Muslims have a minimal presence across various professions, possibly influenced by a lack of established community networks. The examination of citizenship status in these fields highlights the community's diversity and varying degrees of social networks in the US.

The second part of this chapter examined the socio-economic characteristics of non-migrants. The detailed analysis produced several key findings, firstly, regarding age distribution, the majority of non-migrants fall within the younger to middle adulthood stages, with a significant decline in numbers among older age groups. Secondly, gender disparities are evident with males being more prevalent among non-migrants compared to females. Religiously, Hindus constitute the largest religious group among non-migrants followed by Muslims and Christians. Similarly, the marital status distribution shows a significant presence of married individuals, emphasising the importance of stable family structures among non-migrants.

The majority of non-migrants have attained a degree-level education, reflecting a focus on higher education attainment within this population. However, disparities still exist among the non-migrants having lower educational qualifications, possibly impacting their occupational opportunities. The occupational distribution shows that non-migrants are engaged in a diverse range of occupations like cashier, rubber tapping, salesmanship, construction work and other jobs. The results further highlight the interconnection between occupation, education and other factors, revealing patterns of occupational preferences and disparities across different variables.

These results highlight some of the problems existing in the Kerala economy, particularly the low employability of education, where individuals face challenges aligning educational qualifications with meaningful employment outcomes. Along with this, Perpetuating underemployment and economic disparities are also considered key problems of the Kerala economy. Furthermore, the limited absorption capacity of the labour market worsens this issue by failing to provide adequate opportunities for both skilled and less skilled workers.

The next chapter discusses the factors influencing emigration from India to the US, concentrating on both the accelerators and brake pedal of emigration. This chapter is based on secondary data collected from various sources.

ACCELERATORS AND BRAKE PEDAL OF EMIGRATION TO THE USA

-
- *Introduction.*
 - *Results and Discussion.*
 - *Conclusion.*
-

5.1. Introduction.

In the realm of emigration from India to the USA, the accelerators and brake pedal analogy provides a compelling framework to understand the complex interplay among human capital, population density, and economic growth, a trio of determinants, shaping migration dynamics. The brake pedal is embodied in the economic growth rate. As the population density and human capital of India increase, the accelerators stimulate the flow of emigration. However, the brake pedal kicks in when economic growth accelerates, signifying a counterintuitive trend. As India's economy grows, it offers improved prospects domestically and it reduces the pace of emigration. This complex interconnectedness between the accelerators and brake pedal aligns with the brain drain and brain gain theory of migration. In this context, the accelerators (population density, human capital) and brake pedal (economic growth) jointly govern the speed and direction of emigration, influencing the choices individuals make in their pursuit of opportunities on the global stage.

Within the framework of brain drain theory, the augmentation of human capital emerges as a pivotal determinant influencing the migration dynamics from India to the USA. In the analogy of the accelerator and brake pedal, human capital serves as an accelerator that propels individuals towards emigration opportunities. As India invests in education, skills development, and knowledge creation, the workforce becomes more skillful and globally competitive. This enhanced human capital acts as a driving force, pushing individuals to seek avenues beyond national borders in pursuit of better prospects and enhanced livelihoods.

Brain drain theory refers to the emigration of highly skilled and educated individuals from one country to another, often to seek better opportunities, higher salaries or improved living conditions. These individuals are often referred to as brains of the given country which includes scientists, researchers, engineers, doctors, and other experts. The phenomenon of brain drain can have significant consequences for the country of origin. When skilled individuals leave, the nation may experience a loss of intellectual capital, reduced innovation and a decline in the

overall workforce's expertise (Dumont et al 2010, Bhagwati, 1976, Saxenian et.al. 2002).

With a diverse global presence of around 17 million people, India has the largest diaspora in the world (United Nations, 2016). Notably, nearly 3 million are situated in North America, while the Gulf Cooperation Council (GCC) countries collectively host 9 million emigrants (United Nations, 2016). Existing literature highlights that the migration of low-skilled workers from India to the Gulf region is driven by factors such as the pursuit of higher earnings, unemployment and poverty (Noushad et al., 2020; Parida & Raman, 2018; Walton-Roberts, 2015; Zachariah et al., 2000). Additionally, the substantial economic activities stemming from oil discoveries in the Gulf have led to increased opportunities for low-skilled labour (Rajan & Kumar, 2010; Zachariah & Rajan, 2012). While extensive research has explored Gulf migration, its impact and the problems faced by left-behind family members, the emigration of relatively skilled personnel from India to the United States remains underexplored. Various economic, social and demographic conditions in both origin and destination countries serve as driving forces for potential migrants. Normally, the tendency for migration increases when conditions deteriorate in the origin country (push factors) or improve in the destination country (pull factors). Individuals weigh the socio-economic costs and benefits before deciding to migrate, with migration being favoured when the benefits outweigh the costs (Falck et al., 2018).

To formulate effective policies to minimise the negative effect of brain drain and ripen the positive effect of brain gain, it is imperative to understand the motivations behind migration. This chapter seeks to identify the factors that act as accelerators and brake pedal that influence emigration from India to the USA.

5.2. Results and Discussion.

In the initial phase of the analysis, descriptive statistics were presented and analysed. Table 5.1 illustrates the results of these statistics, depicting the highest average value for EMIUS followed by GDP, DP and HC respectively.

Table .5.1
Descriptive Statistics.

Variable	LNEMIUS	LNGDP	LNHC	LNDP
Mean	13.9240	6.9776	0.6409	5.8745
Median	13.9873	6.9810	0.6417	5.8859
Maximum	14.5917	7.5872	0.7753	6.0299
Minimum	13.0330	6.4271	0.4707	5.6810
Std. Dev.	0.4728	0.3648	0.0857	0.1076
Skewness	-0.3497	0.1506	-0.2244	-0.2492
Kurtosis	1.9585	1.7719	2.1329	1.8368
Jarque-Bera	1.6392	1.6655	0.9931	1.6683
Probability	0.4406	0.4348	0.6086	0.4343

Source: Computed from Secondary data.

Table 5.1 shows that the variables presented in the table exhibit similar volatility patterns. However, EMIUS, DP and HC display higher left tails, while GDP shows a right tail. Moreover, the variables follow a normal distribution as the significance of the Jarque-Bera test is far from the 5% and 1% levels of statistical significance.

Table.5.2
Unit Root Test Results.

	Augmented Dickey-Fuller (ADF)		Phillips-Perron (PP)	
	Levels	Difference	Levels	Difference
LNEMIUS	-2.789	-3.817**	-2.189	-3.817**
LNGDP	-2.675	-4.276***	-1.976	-4.237***
LNHC	-1.242	-3.701**	-1.242	-3.701**
LNDP	0.670	-3.411**	0.540	-13.619***

Source: Computed from Secondary data. Note: *, ** and *** indicate 10%, 5% and 1% significance levels, respectively.

To investigate the long-run relationship among EMIUS, GDP, HC, and DP, the study assesses the stationarity of each variable in the initial stage by using unit root test (Table 5.2). The examination focuses on determining whether the variables are integrated, allowing for standard inferences. Standard unit-root tests, specifically the Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP) approaches are employed to test the stationary properties of the time-series observations. The outcomes of the tests in Table 5.2 reveal that the rejecting null hypothesis of unit roots is impossible at the levels of all variables. However, the conventional significance levels have been observed for the first difference of the variables across the tests. Hence, it found that all variables are I (1) series.

After ascertaining the integration order of the variables, the long-run relationship among the variables in the US emigration function has been estimated within the ARDL framework. The selection of an appropriate lag length is crucial, and the Akaike information criterion (AIC) is employed for this purpose. Additionally, Narayan's (2005) critical upper [I (1)] and lower [I (0)] bounds statistics are considered a benchmark for comparing the estimated F-statistics, given their suitability for a smaller number of observations. Table 5.3 presents the ARDL cointegration test results, indicating that the estimated F-statistics exceed Narayan's (2005) upper bound value. Consequently, the long-run relationship is confirmed among the study variables.

Table 5.3
The Results of the ARDL Cointegration Test.

Estimated model	Optimal lag length	F-statistics	
$EMIUS_t = f(GDP_t, HC_t, DP_t)$	(1, 0, 0, 1)	7.266***	
		Lower bounds I(0)	Upper bounds I(1)
	10%	2.618	3.532
	5%	3.164	4.194
	1%	4.428	5.816
Diagnostic tests of the model			
χ^2_{SERIAL}	0.6294[0.4385]		
χ^2_{ARCH}	1.0128[0.3257]		
χ^2_{RESET}	0.5349[0.4745]		

Source: Computed from Secondary data. Note: *** indicates 1% significance levels.

Table 5.4 reports the ARDL model-based estimates for both the long run and short run. The outcomes reveal a negative association between emigration to the USA and India's economic growth.

Table .5.4.
Long and Short Runs Result Estimates.

Dependent variable = LNEMIUS				
Long run results Variable	Coefficient	Std. Error	t-Statistic	Prob.
LNGDP	-0.226**	0.100	-2.255	0.037
LNHC	2.024***	0.702	2.883	0.010
LNPd	3.875***	0.655	5.919	0.000
C	-8.763**	3.696	-2.371	0.029
Short run analysis				
Δ LNGDP	-0.376***	0.137	-2.743	0.013
Δ HC	0.761***	0.190	3.998	0.001
Δ LNPd	1.457*	0.751	1.941	0.068
ECM(-1)	-0.376***	0.056	-6.664	0.000
Goodness of fit				
R-squared	0.92	Mean dependent var	0.065	
Adjusted R-squared	0.92	S.D. dependent var	0.019	
S.E. of regression	0.005	Akaike info criterion	-7.545	
Sum squared resid	0.001	Schwarz criterion	-7.447	
Log-likelihood	92.546	Hannan-Quinn criterion.	-7.519	
Durbin-Watson stat	2.236			

Source: Computed from Secondary data. Note: *, ** and *** indicate 10%, 5% and 1% significance levels, respectively.

Specifically, a 1% increase in economic growth in India results in a reduction in emigration of approximately -0.226% (-0.376%) in the long run (short run). This implies that if productivity and prosperity of the economy increase, then the people are less likely to emigrate as they are getting a better standard of living in the home country itself. It establishes the view that growth has a spillover effect in creating jobs that strike a chord with the needs of the emigrants (jobs are suggestively capital as observed by Panagaria, 2006). Consequently, there seems to be no necessity to explore economic opportunities overseas to enhance living standards. This discovery provides an exciting insight into the imperative requirement for substantial

investments, amounting to billions of dollars to foster economic development by addressing the root causes of migration.

The result shows that emigration to the USA is positively correlated with India's human capital development. More specifically, a 1% increase in human capital development results in a 2.024% (0.761) growth in emigration in the long run (short-run). This observation indicates that individuals with skilled expertise and innovative mindsets are leaving India in pursuit of better livelihood opportunities. This trend is partly due to the lack of good employment opportunities and higher education options in India. Thus, individuals migrate to other countries to gain advanced skills in their respective fields, thereby seeking better prospects for a decent life. The undervaluation of talent even after acquiring skills emerges as another potential driver of emigration. Human capital formation through education as Schultz (1968) opined is an investment via education expenditure and expands economic choices. As per the efficiency wage model, the firms should pay a wage above the market-clearing wage to sustain skilled employees and improve the firm's productivity. In the premises of low private investment partaking, coupled with the economy being in a very juvenescence state of affairs, the efficiency wage would be relatively high in the developed countries. Further, the choices of exploring opportunities are higher as it provides labour mobility, better facilities, emoluments and a standard of life.

Furthermore, this study uncovers that population density has a positive impact on emigration to the USA. Specifically, a 1% increase in population density results in a 3.87% (1.45%) rise in emigration in the long run (short-run). This finding could be attributed to the notion that an increased population in a particular region necessitates the movement of people to other regions in search of improved job opportunities, ultimately aiming for a better quality of life. Another possible reason could be the disparities in the country's development, where uneven economic growth contributes to unequal distribution in densely populated areas. Therefore, individuals from such areas migrate to other countries in pursuit of higher income, thereby enhancing their living standards. Apparently, the supply of labour is

relatively high in India and the country is in a promising economic state of affairs. However, it is unable to provide enough opportunities to accommodate this labour even though human capital-intensive jobs have shown a decent rise since the post-1990 era. Still, the demographic dividend translated by the bulge of mobile young force has enough skill and expertise that cannot be fully absorbed by the domestic economy. Hence industrialised countries have pull factors that contribute to the creation of an international labour market and division of labour where supply and demand for labour meet.

Figure.5.1

CUSUM Tests at 5% Level of Significance.

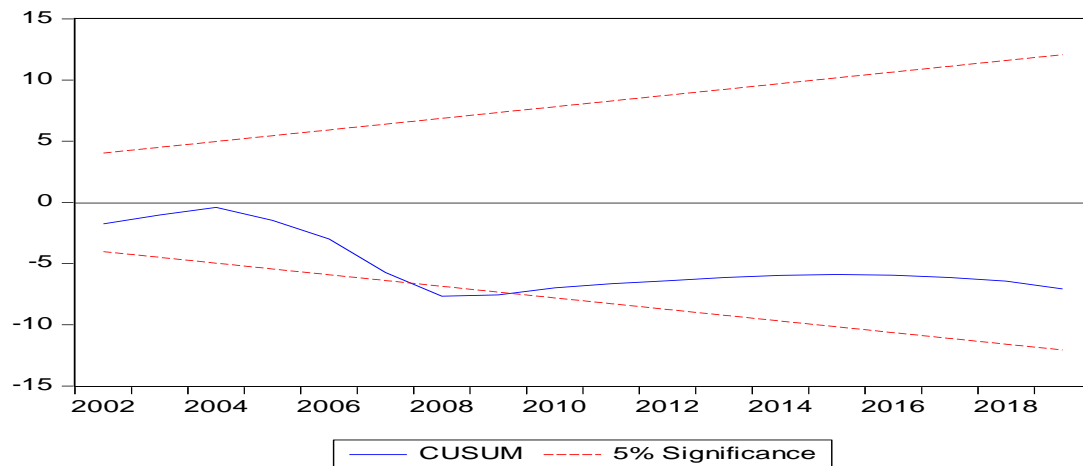
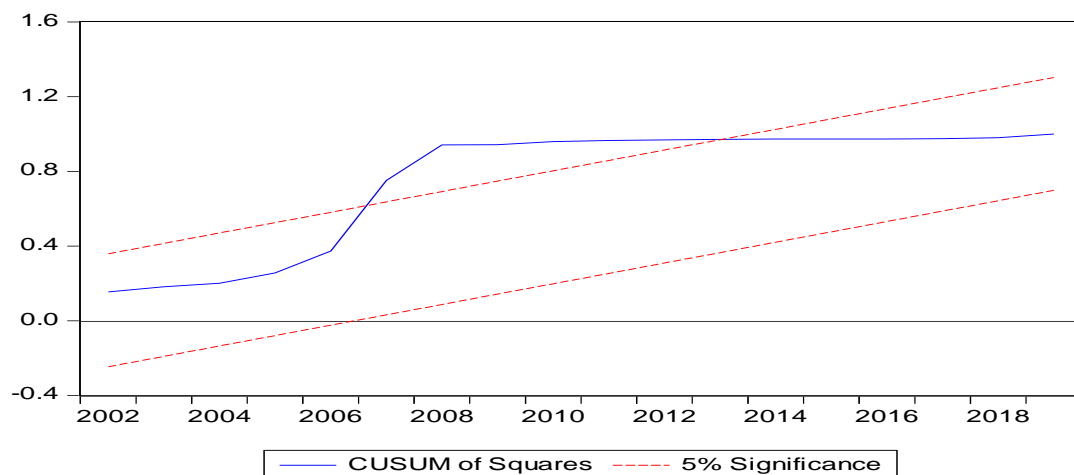


Figure.5.2

CUSUMsq Tests at 5% Level of Significance.



In the final phase of the study, the cumulative sum of recursive residuals (CUSUM) and the square of recursive residuals (CUSUMsq) were computed and depicted in Figures 5.1 and 5.2 respectively. The results reveal the stability of the parameters of the EMIUS model for all periods except 2008. This observed structural instability might be attributed to the global financial crisis, which induced a substantial change in emigration patterns to the USA during that particular year. Likewise, the study conducted tests for heteroscedasticity, stability and serial correlation of the ARDL model and the findings indicate the absence of such issues in the model (refer to Table 5.4). Also, the coefficient of determination (R^2 and adjusted R^2) reveals that approximately 92% of the variation in emigration to the US is determined by the considered factors. Besides, the non-existence of autocorrelation can be observed from the Durbin-Watson test as it is on par with the standard value.

5.3. Conclusion.

Global migration is one of the world's most challenging present and future concerns. While sending countries grapple with the negative consequences of the migration of skilled workers, receiving countries face the problem of integrating migrants of all cultures and nationalities into their domestic labour markets and societies (Collier, 2013). This study explores how India's GDP growth, human capital and population density influence emigration from India to the United States of America. The argument is that higher rates of emigration from India to industrialised nations are linked to more lucrative benefits, improved job prospects and better educational opportunities (Noushad et al., 2020). Thus, the study suggests that population density and human capital development in India act as accelerators of emigration, while economic growth in India acts as a brake on emigration to the US. Individuals with high levels of human capital (education, skills, and knowledge) may perceive migration to the US as an opportunity to further utilise and capitalise on their skills. The movement of skilled individuals across borders reduces the human resource potential of the country of origin, thereby adversely affecting the overall growth.

The study establishes that human capital formation increases emigration while economic growth reduces the pace of emigration from India. It shows that, despite being one of the fastest-growing countries in the world, India is still catching up with industrialised economies rather than leading in technology. This means India needs to work harder to match the development of industrialised nations. The challenge is to drive sustained economic growth that provides enough opportunities for the growing skilled labour force, ensuring they have ample room and prospects within the country. Hence reversal of emigration is a function of growth, the economy has to fully mature into a near-picture perfect full-fledged market economy that is capable of incentivising skilled human capital with better endowments, efficient wages and emoluments. The empirical findings confirm a long-term association between variables, revealing both positive and negative impacts of emigration to the United States on the Indian economy. Specifically, the study indicates a negative correlation between emigration and India's GDP growth, while positive associations are observed with the growth of India's human capital and population density.

The emigration of skilled workers produces both positive and negative effects. The negative side of emigration, often referred to as brain drain is evident in the findings of the study. The negative correlation between the number of Indians emigrating to the United States and GDP growth underlines the urgent need for substantial investments to address the root causes of migration. Skilled labour force and creative minds are leaving India due to inadequate work opportunities and limited post-acquisition education opportunities. To mitigate brain drain, strategic investments in new employment generation projects, education, vocational training and skill development programs are crucial. This approach aims to create an environment within India that retains skilled professionals and fosters local talent, ultimately reducing the propensity for brain drain. Policymakers should develop strategic initiatives to moderate the adverse impacts of brain drain while maximising the positive effects of brain gain. Allocating substantial investments toward fostering economic growth and generating employment opportunities can play a crucial role in achieving these objectives.

Conversely, on the positive side, emigration to the United States contributes to a phenomenon known as brain gain. Skilled individuals leaving India for the US bring about the transfer of remittances and the transmission of expertise, knowledge and technology back to their home country. This brain gain fosters a spillover effect, actively contributing to India's economic growth. Skilled professionals returning to India often bring valuable ideas and advancements, creating an environment conducive to innovation and development (Hunger, 2002, Anjali, 2009, Buga and Meyer-2012). This mutually reinforcing relationship between emigration and economic growth can be leveraged to the nation's advantage. Implement initiatives that facilitate the transfer of knowledge and expertise gained by emigrants back to India. This can be achieved through collaborations, mentorship programs, partnerships between Indian diaspora communities and local institutions, fostering international collaborations and partnerships. The exchange of ideas, research and innovation between India and the US creates a global network that benefits both the local economy and the global community.

Finally, the association between emigration to the US and population density reveals the disparities in the nation's development. It highlights the country's development inequalities. However, in densely populated places, economic development imbalances result in unequal distribution. As a result, residents of the area migrate to nearby countries in search of a higher level of living. So governments need to take the required steps to promote balanced growth.

The next chapter deals with the influence of various endowments such as individual endowments, family endowments and social endowments on emigration from Kerala to the USA.

EMIGRATION FROM KERALA TO THE USA: THE ENDOWMENTS AND CAPABILITIES

-
- *Introduction.*
 - *Logistic Regression and Migration Probabilities.*
 - *Endowments: A Brief Overview.*
 - *Conclusion.*
-

6.1. Introduction.

For many years, people have been migrating from Kerala to the United States in search of improved economic prospects, greater educational possibilities and a higher standard of living. Migration itself is a complex process and is influenced by a wide range of factors. Migration patterns and outcomes are greatly influenced by some endowments, both familial, Social and personal.

This chapter explores the relationship between different endowments and emigration, examining how these endowments influence the decision to migrate. This objective offers a small base for migration capacities that encourage skilled individuals to migrate from Kerala to the United States. The ‘endowments and capabilities’ approach by Amartya Sen provides the theoretical foundation for this objective.

The term endowments and capabilities is used by Amartya Sen to describe the combination of an individual’s resources (endowments) and their capacity to transform those resources into opportunities or useful functioning (capabilities). Endowments comprise a range of factors, including social interactions, education, health and personal qualities etc...(Ghosal, 2000). They serve as the foundation for evaluating an individual’s overall well-being (Sen, 1982, 1985, 1987, 1999). The abstraction of growth and development turn around mint evidence for Amartya Sen’s Capability theory. Capability theory defines human development as synergised by endowment and capability creation leading to the enlargement of human choice (Nussbaum, 2011). This chapter is divided into two sections, the former shows the descriptive cross-tab study of various endowments and their relationship to migration and the latter displays the impact of these endowments on people’s decisions to migrate.

Table.6.1
Age Status of the Migrants and Non-Migrants.

Age	Status of Migration					
	Non-Migrants		Migrants		Total	
	Freq.	Per cent.	Freq.	Per cent.	Freq.	Per cent.
20-40	203	94.4	108	75.52	311	86.87
41-70	12	5.6	35	24.48	47	13.13
Total	215	100%	143	100%	358	100%

Source: Primary Survey, 2023

Table 6.1 shows the distribution of migrants and non-migrants by their age group. There are 94.40% non-migrants and 75.52% migrants in the age group of 20-40. In the age group of 41 to 70, there are 5.60% non-migrants and 24.48 % migrants. The majority of migrants (75.52%) fall into the age category of 20-40, this result highlights that younger people are more likely to migrate than older people from Kerala to the USA. The migration of younger individuals from Kerala possibly impacts human capital development in the state, thus the sending state may lose skilled young workers, which could hinder human capital accumulation and economic development.

Table.6.2
Educational Status of the Migrants and Non-Migrants.

Education	Status of Migration					
	Non-Migrants		Migrants		Total	
	Freq.	Per cent.	Freq.	Per cent.	Freq.	Per cent.
SSLC and Below	31	14.4	0	0	31	8.66
Plus Two/PDC	40	18.6	0	0	40	11.18
Degree	114	53	35	24.48	149	41.62
PG	30	14	91	63.63	121	33.8
Technical Education	0	0	16	11.19	16	4.47
Others	0	0	1	0.7	1	0.27
Total	215	100%	143	100%	358	100%

Source: Primary Survey, 2023

Table 6.2 displays the distribution of both migrants and non-migrants by educational attainment. For the SSLC and below qualification, there are 0% migrants and 14.40% non-migrants. This implies that those with SSLC and below are less likely to move than people with more education. With Plus Two/PDC qualification, there are 18.60% non-migrants and 0% migrants. There are 24.48% bachelor degree holding migrants and 53% non-migrants. Similarly, with a postgraduate degree, there are 63.63% migrants and 14% non-migrants. This suggests that persons with bachelor's degrees and postgraduate degrees have a higher chance of moving to the US than people with less education. Thus one of the important factors which enforce the mobility of labour is education.

There is a concern about a potential loss of human capital that could impact the competitiveness and economic output of Kerala. This can be referred to as brain drain and may cause a scarcity of highly qualified individuals, affecting innovation and local economic growth. However, there are benefits as well, the remittances that they send home improve the living conditions, support local businesses, encourage education and so on. Recognising the link between education and migration emphasises the importance of targeted policies for policymakers seeking to minimise migration-related challenges. Policymakers can alleviate the problem of brain drain by prioritising investment in higher education, offering new business avenues, promoting skill development programmes and creating a stronger local talent pool.

Table.6.3

Gender Status of the Migrants and Non-Migrants

Sex	Status of Migration					
	Non-Migrants		Migrants		Total	
	Freq.	Per cent.	Freq.	Per cent.	Freq.	Per cent.
Male	169	78.60	121	84.62	290	81
Female	46	21.40	22	15.38	68	19
Total	215	100%	143	100%	358	100%

Source: Primary Survey, 2023

Table 6.3 illustrates the difference between male and female migratory patterns. Compared to females, males have a higher likelihood of migration. Out of

the total migrants, 84.62% are males, while only 15.38% are females. Similarly, among the total non-migrant respondents, 78.60% are males, and 21.40% are females. This implies that men may look for possibilities outside of their areas of origin due to financial incentives, personal desires and educational goals. This suggests that the variables driving male migration could not be the same as those driving female migration. Thus the overall results highlight that endowments work differently among men and women. The Economic Implications of these findings are Labour Market Dynamics. Firstly, the dynamics of the labour market in the region of origin may be impacted by the greater rates of migration among men. This might result in a lack of male workers in some industries in Kerala, which could have an impact on productivity and output. The second economic implication of this result highlights the positive impact of male migration on the financial security of the families and communities of migrants.

Table.6.4**Landholding Status of Migrant and Non-Migrant Families.**

Total land Owned	Status of Migration					
	Non-Migrants		Migrants		Total	
	Freq.	Per cent.	Freq.	Per cent.	Freq.	Per cent.
0	60	27.91	3	2.1	63	17.6
1-25 cents	85	39.54	44	30.77	129	36.04
26-50 cents	43	20	43	30.07	86	24.02
51-100 cents	18	8.37	28	19.58	46	12.85
101-200 cents	9	4.18	23	16.08	32	8.94
201 and Above	0	0	2	1.4	2	0.55
Total	215	100%	143	100%	358	100%

Source: Primary Survey, 2023

The data enlisted in Table 6.4 demonstrates the relationship between family assets (land holding) and migration. A closer look at the distribution reveals that families with smaller land holdings particularly those in the 1-25 and 26-50 cent range are more common among both migrants and non-migrants. Further results

show that land ownership ranges from 51-100 cents, 101-200 cents, and 201 and above are more common among migrants compared to non-migrants. Therefore, a significant trend emerges from the study which highlights the positive impact of a family's property holdings on the emigration of their family members. In the 51-100 range, there are 19.58% migrant households and 8.37% non-migrant families. This disparity suggests that households possessing land above a minimum limit have a higher propensity to migrate. The data further show that there are 4.18% non-migrant households and 16.08% migrant households in the 101-200 cent category. This substantial difference confirms the trend observed in the previous category and indicates a stronger preference for migration among households with larger land holdings. Thus it is evident that the probability of migration rises when the land ownership of family increases.

Table.6.5**Religious Status of the Migrants and Non-Migrants.**

Religion	Status of Migration					
	Non-Migrants		Migrants		Total	
	Freq.	Per cent.	Freq.	Per cent.	Freq.	Per cent.
Hindus	113	52.56	49	34.26	162	45.25
Christians	39	18.14	87	60.84	126	35.19
Muslims	63	29.3	7	4.9	70	19.56
Total	215	100%	143	100%	358	100%

Source: Primary Survey, 2023

Table 6.5 provides information regarding the correlation between emigration and religion. A significant portion who migrated to the US are Christians, specifically 60.84 % out of the total migrant population. On the other hand, 34.26% of migrants are Hindus and there is considerably less migration (4.90%) among the Muslim community. The results show a notable skewness in the migration pattern, with Christians significantly dominating the migration to the US. This tendency may be caused by several factors, such as economic status, educational opportunities and community-specific networks (religious affiliation) to overseas locations. Among the non-migrant category, Hindus are the predominant category with 52.56%

followed by Muslims at 29.30% and Christians at 18.14%. The predominance of Hindus in the non-migrant category may have a combination of economic stability, occupational diversity and cultural factors that collectively contribute to their inclination to remain in their homelands.

Table.6.6

Social Networks Status of the Migrants and Non-Migrants.

Status of Migration	Status of Network					
	Networks in the US		No networks in the US		Total	
	Freq.	Per cent.	Freq.	Per cent.	Freq.	Per cent.
Non-migrants	53	32.91	162	82.23	215	60.05
Migrants	108	67.09	35	17.77	143	39.95
Total	161	100%	197	100%	358	100%

Source: Primary Survey, 2023

The given table 6.6 shows an extensive overview of the respondents concerning the existence of networks in the US and migration status. The majority of non-migrants (82.23%) reported having no networks in the United States. This suggests that a sizable portion of the respondents who have chosen not to migrate to the US may be due to the lack of properly established social networks or contacts in the US. On the other hand, the table presents that a significant proportion of migrants (67.09%) have networks in the US. The significance of social networks for people who have migrated from Kerala to the US is highlighted by these results. Pre-existing networks can provide valuable assistance with job possibilities, community integration, guidance etc...

6.2. Logistic Regression and Migration Probabilities.

The Logistic regression technique was employed for the second part of this chapter to explain the relationships between different endowments and the migration probability of the individuals. Rich human capital, familial capital and social capital are closely related to the emigration trends and patterns of Kerala to the United States. A large component of the human capital of Kerala consists of skilled workers

who are attracted to the USA by its prospects for advancement and distinction in their field. Family capital often influences their decision to move overseas since inheritances of families such as land holdings (assets) provide the support and guidance needed for a smoother transition. Moreover, social capital including religion and social networks in the US has an impact on US emigration trends in Kerala. The combination of these resources and skills provides a comprehensive picture of the micro-foundations that propel skilled migration from Kerala to the United States.

6.3. Endowments: A Brief Overview.

Knowledge, skills and abilities of an individual are considered human capital and are taken as the pertinent elements of economic activities of any economy. Individuals with greater human capital have a higher propensity to migrate than those with less, this is because human capital is an important resource that can support people in thriving in their new environments. For instance, in the US, those with more academic qualifications are more likely to be employed in skilled professions and make more money. Further, there is a greater chance that they will be able to adjust to any linguistic and cultural barriers they may face in the US. Age and education are important factors in determining human capital. Likewise, age is also a major determinant of a person's propensity to migrate. Since younger people tend to be more adaptable and ready to pick up new skills, they are better equipped to handle the challenges of migration. With physical stamina and energy levels, younger people are more suitable for a variety of occupations and overcome different challenges confronted in the destination country.

Family capital, which includes the assets and assistance that people receive from their families, is essential to improving their chances of migration. Financial barriers to migration can be compensated by family members who are offering crucial financial support to pay for their first living expenses, lodging, transportation and other migration-related expenses. They also provide emotional support and direction in overcoming the psychological and cultural obstacles associated with adapting to a foreign nation. Family capital, which includes the total amount of land (asset) owned by household heads, is one of the elements for successful migration

because it offers a solid support system and empowers people to overcome challenges. For households, the assets are important resources, they ensure safety nets and income. The possession of assets raises living standards and assists in fulfilling financial commitments.

Emigration trends can be greatly influenced by social capital, which includes religion and social networks in the US. These elements affect the perceptions of people in prospects and limitations, which in turn affects their decisions to migrate and the experiences they have in the country of destination. Social networks of an individual create a sense of belonging and a support system. Religion may also have an effective form of social capital, religious organisations can provide resource mobilisations, information exchanges and emotional support, which can boost both the physical and mental well-being of the migrants. In addition to all these capital (endowments), gender also plays a crucial role in shaping emigration to the US.

Here a logistic regression model was employed to examine the determinants of migration, treating non-migrants as the reference category. The logit model is particularly suited for binary outcomes, such as the dichotomous variable indicating migration (coded as '0' for no migration and '1' for migration). This model assumes a logistic distribution of errors, allowing for the estimation of the probability of migration based on various independent variables. The dependent variable in this case is the migration status of respondents and the independent variables include human capital factors such as education and age, social capital components like social networks and religion, and family capital such as familial assets like land. The application of the logit model enables the assessment of how these factors influence the likelihood of migration.

Table.6.7

Model Information.

Dependent Variable	Status of Migration^a
Probability Distribution	Binomial
Link Function	Logit

Source: Computed from Primary Survey, 2023

a. The procedure models Migrants as the response, treating non-migrants as the reference category.

It is essential to note the choice of the logit model over an alternative like the probit model. While both are suitable for binary outcomes, the logit model assumes a logistic distribution of errors, whereas the probit model assumes a normal distribution of errors. By opting for the logit model, it holds the logistic distribution's characteristics, such as symmetry and heavy tails, aligning with the nature of migration probabilities. The theoretical framework guiding this analysis draws on Sen's endowment and capability approach. Sen's perspective emphasises the importance of individuals' endowments, capabilities and freedoms to lead a valuable life (Sen, 1982, 1985, 1987, 1999). In the context of migration, this approach may be applied to understand how various forms of capital like human, social and family capital contribute to individuals' capabilities to make choices regarding migration.

Table.6.8
Categorical Variable Information.

			Number	Per cent
Dependent Variable	Status of Migration	Non-Migrants	215	60.1%
		Migrants	143	39.9%
		Total	358	100.0%
	Sex	Male	290	81.0%
		Female	68	19.0%
		Total	358	100.0%
	Religion	Non-Christians	232	64.8%
		Christians	126	35.2%
		Total	358	100.0%
	Networks in the US	Yes	161	45.0%
		No	197	55.0%
		Total	358	100.0%

Source: Computed from Primary Survey, 2023

Table 6.8 presents information on categorical variables used in the analysis, specifically focusing on the dependent variable (Status of Migration) and several independent dichotomous variables. The dependent variable, i.e., Status of

Migration has two categories such as migrants and non-migrants. For the independent dichotomous variables (factors), the table provides information on three specific variables: Sex, Religion and Networks in the US. Each of these variables has two categories and the table includes the number and percentage of observations in each category. The variable Sex has two categories; Male and Female. The table indicates that 81% of the observations are classified as Males, while 19% are classified as Females. The variable Religion distinguishes between Christians and non-Christians. The percentages indicate that 64.8% of the observations fall under non-Christians and 35.2% fall under Christians. The factor networks in the US assess the presence or absence of social networks in the US, with categories Yes and No. The table shows that 45% of the observations have networks in the US, while 55% do not.

Table.6.9
Continuous Variable Information.

	N	Minimum	Maximum	Mean	Std. Deviation
Age of Migrants and Non-Migrants	358	23	55	30.52	8.651
Covariate Education of the Migrants and Non-Migrants	358	2.00 (SSLC & Below)	7.00 (Others)	4.1508	1.03151
Landholding of the Head of the Households (in cents)	358	0	250	39.09	48.181

Source: Computed from Primary Survey, 2023

Table 6.9 provides information on continuous variables, also known as covariates, used in the analysis. These variables are considered independent variables and are characterised by numerical values. The table includes the number

of observations, the minimum and maximum values, the mean and the standard deviation for each continuous variable. The covariate age shows that there are 358 observations with ages ranging from 23 to 55 of both migrants and non-migrants. The mean age is 30.52 and the standard deviation is 8.651. The covariate education reflects the educational level of both migrants and non-migrants. The table indicates that there are 358 observations, with educational levels ranging from SSLC and below to others. The mean education level is 4.1508 and the standard deviation is 1.03151. The size of land holding of the head of the households (HH) is another covariate and is measured in cents. The table shows that there are 358 observations, with land holdings ranging from 0 to 250 cents. The mean land holding is 39.09 and the standard deviation is 48.181. This variable captures the family capital in terms of land holdings.

Table 6.10
Block 0- Beginning Block
Classification Table^{a,b}

Observed		Predicted		
		Status of migration		Percentage Correct
		Non-Migrants	Migrants	
Step 0	Status of Non-Migrants	215	0	100
	Migration Migrants	143	0	0
	Overall Percentage			60.1

Source: Computed from Primary Survey, 2023

- a. The constant is included in the model.
b. The cut value is .500

Table 6.10 presents a classification table for Block 0, representing the beginning block without any independent variables, where only the constant (intercept) is included. The table contrasts the observed and predicted values for the status of migration, categorising individuals into Non-Migrants and Migrants. Strikingly, the model fails to predict any occurrences of migration (Migrants category). This outcome shows the limitations of the baseline model, signifying that

the constant alone is insufficient for predicting the odds of migration. The overall percentage correct value is reported as 60.1%, indicating a moderate level of accuracy of the model, which failed to predict any migration events. This highlights the necessity of incorporating independent variables to enhance the model's predictive capacities. The classification table serves as an initial diagnostic tool to assess the performance of the model, emphasising the importance of introducing relevant predictors. In the absence of explanatory variables, the model cannot differentiate between Non-Migrants and Migrants. The cut value of 0.500, used as a threshold for classification, appears to contribute to the misclassification of all cases into the Non-Migrants category. This emphasises the need for a more sophisticated model that incorporates relevant factors such as human capital, social capital and family capital to better capture the complexities of migration decisions.

Table.6.11
Variables in the Equation.

		B	S.E.	Wald	Df	Sig.	Exp (B)
Step 0	Constant	-0.408	0.108	14.281	1	0.001	0.665

Source: Computed from Primary Survey, 2023

Table 6.11 shows details of a null model and it offers ideas about the variables included in the equation for a model without any independent variables except the constant. In this null model, the only variable included is the constant, denoted as 'Constant' in the table. The coefficient (B) for the constant is -0.408, with a standard error (S.E.) of 0.108. The Wald statistic, which assesses the significance of the coefficient is 14.281 with 1 degree of freedom (df). The associated P-value (Sig.) is reported as 0.001, indicating that the constant is statistically significant. The Exp (B) represents the exponentiation of the coefficient and is 0.665. In the context of logistic regression, Exp (B) corresponds to the odds ratio. This null model essentially provides the baseline or unconditional log odds of migration (migration=1).

Table.6.12**Variables Not in the Equation.**

		Score	df	Sig.
Step 0	Variables	Sex	20.017	1 0.06
		Age	75.74	1 0.001
		Religion	68.651	1 0.001
		Education	131.302	3 0.001
		Networks in the US	89.814	1 0.001
		Landholding of HH	46.224	1 0.001
		Overall Statistics	192.372	8 0.001

Source: Computed from Primary Survey, 2023

Table 6.12 focuses on variables not in the equation and it presents the results of a Score Test (or Lagrange Multiplier test) for each variable's potential inclusion in the model. The Score column indicates the estimated difference in model fit if a specific variable is included. The subsequent columns display the degrees of freedom and the P value (Sig.) for the estimated change. Notably, all independent variables such as Sex, Age, Religion, Education, Networks in the US and Land of the Household (LNDHH) show significant improvements in the fit of the model, as evidenced by low P-values. These findings show the importance of incorporating these variables into the model to enhance its explanatory power and better capture the factors influencing migration outcomes. The Overall Statistics section indicates a collective improvement in model fit and it emphasises the significance of these variables in contributing to a more inclusive understanding of migration dynamics.

Block 1**Table.6.13****Omnibus Tests of Model Coefficients.**

		Chi-square	df	Sig.
Step 1	Step	259.948	8	0.0001
	Block	259.948	8	0.0001
	Model	259.948	8	0.0001

Source: Computed from Primary Survey, 2023

Block 1 signifies a more detailed approach by including all independent variables in the model. Table 6.13 provides the results of omnibus tests of model coefficients and it gives an overall assessment of the model's fit with the included predictors. The Chi-square value is reported with 259.948, along with 8 degrees of freedom. The associated P-value (Sig.) is very low at 0.0001 and this pattern repeats in subsequent rows of the model with similar low P-values (0.0001). The Chi-square test with a P-value well below the 1% significance level indicates that the model, which incorporates the regressors fits considerably better than an empty model (one with no predictors). In essence, these findings suggest that the inclusion of the independent variables significantly enhances the ability of the model to explain and predict the process of migration.

Table.6.14
Pseudo R Square and Model's Fit.

Model Summary			
Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	221.713 ^a	.516	.698

Source: Computed from Primary Survey, 2023

Table 6.14 gives a broad summary of the model's performance by utilising -2 times the log-likelihood (-2 Log likelihood) as a comparative metric for tested models. The reported value of 221.713^a serves as a measure of the model's fit with lower values indicating better fit. Two pseudo R² measures like Cox & Snell R² (0.516) and Nagelkerke R² (0.698) offer ideas about the proportion of variance in the dependent variable explained by the model. Pseudo R² is particularly relevant in the context of nominal or ordinal outcome variables where traditional R² cannot be applied. The Nagelkerke R² in this case is deemed a more robust measure of model fit and its value of 0.698 indicates that the model captures a significant portion of the variation in the dependent variable. Note that the estimation terminated at iteration number 7 because parameter estimates changed by less than 0.001 suggests that the model estimation process halted after a stable configuration was reached. McFadden's 1974 recommendation on pseudo-R² values suggests that a range

between 0.2 and 0.4 indicates a good model fit in logistic regression. Values exceeding 0.4 are considered excellent, signifying the model's ability to explain the outcome variable. In this model, the Nagelkerke R Square is 0.698 and it falls within the excellent range, highlighting its substantial explanatory power.

Table.6.15
Logit Coefficient and Odds Ratio.

Parameter	B	Std. Error	Parameter Estimates							
			95% Wald Confidence Interval		Hypothesis Test			Exp(B) Or Odds Ratio	95% Wald Confidence Interval for Exp(B)	
			Lower	Upper	Wald Chi-Square	df	Sig.		Lower	Upper
(Intercept)	-11.592	1.5389	-14.609	-8.576	56.742	1	.001	9.235E-06	4.524E-07	.000
[Male=1]	.721	.4289	-.119	1.562	2.828	1	.093	2.057	.887	4.768
[Non-Christian=1]	-1.217	.3644	-1.931	-.503	11.160	1	.001	.296	.145	.605
[Networks in the US =1]	1.963	.3447	1.287	2.638	32.414	1	.001	7.119	3.622	13.991
Age	.087	.0273	.033	.140	10.169	1	.001	1.091	1.034	1.151
Education	1.715	.2744	1.177	2.253	39.068	1	.001	5.558	3.246	9.517
Landholding of the HH (Scale)	.014	.0051	.004	.024	7.235	1	.007	1.014	1.004	1.024

Source: Computed from Primary Survey, 2023

Dependent Variable: Status of Migration (Migration (1) and Non-migration (0))
Model: (Intercept), Sex, Religion, Networks in the US, Age, Education, Landholding of the HH

The logistic regression model aims to understand the factors influencing migration choices to the US. The intercept, representing the baseline probability of migration when all other predictors are zero, is -11.592, indicating an extremely low likelihood. The binary variable sex representing a change from 0 to 1 (female to male) significantly increases the odds of migration to the US with a positive coefficient of 0.721 and an odds ratio of 2.057. This suggests that changing from female to male increases the odds of migration by 105.7 per cent at a 10% level of significance. It implies male migration for employment purposes is higher compared to females. In terms of religion, changing from 0 to 1 (Christian to non-Christian)

produces a negative coefficient of -1.217 and an odds ratio of 0.296 highlighting a 70.4% reduction in the odds of migration for non-Christians. Being a Christian is found to be an advantageous factor for migration. It indicates the existence of higher social capital among Christian communities compared to non-Christians.

Variables such as networks in the US and education have positive coefficients with the former significantly promoting migration (6 times higher odds) and the latter indicating that an increase in education (a proxy for human capital) significantly raises the odds of migration by more than 4 times. The variable age has a positive coefficient, suggesting a marginal 9% increase in the odds of migration. Even though the family capital as indicated by the land of households has a feeble value, there is still a statistically significant coefficient. Thus family capital in terms of increase in the land size marginally increases the odds of migration.

The logit model estimation guided by Sen's endowment and capability approach reveals the significance of various endowments, such as social endowments or social capital (networks, religion), individual endowments or human capital (education, age), family endowment or family capital (land holding of the parents or head) and gender, on the probability of migration. The odds ratios and coefficients provide a better understanding of the comparative influence of these endowments on migration outcomes.

Among the various factors, social capital like networks and Christian background and human capital particularly the education level of individuals emerge as highly influential factors in shaping migration. The odds ratio indicates that being non-Christian reduces the likelihood of migration by 70.4% emphasising the impact of religious affiliation. In contrast, the existence of social networks in the USA increases the odds of migration by 6 times, highlighting the pivotal role of social capital in facilitating migration processes. Similarly, education, a key component of human capital contributes significantly with each increase in education level associated with approximately a fivefold increase in the odds of migration.

6.4. Conclusion.

This study categorised the endowments of people in different categories such as human capital, social capital, family capital and gender to capture how these endowments influence the likelihood of emigration from Kerala to the US. This framework supports both Amartya Sen's capability approach and Schultz's theory in the context of emigration, which views education as an investment that expands the choices of people. Additionally, this framework directly impacts migration patterns, as individuals seek out greater prospects elsewhere.

A significant finding of this study is that human capital formation in terms of education and social capital in terms of networks in the US has a vital influence on migration. The social background of not being Christian significantly hampers the prospects of emigration compared to Christians. Gender has a huge role in manipulating the international labour market in the US in favour of men. As the Gender assumes the value 1, which is men, their odds of being in the US as a job holder is twice greater than that of women. This further defines men who are highly educated, have better social networking ties and have an upper-class Christian background have much more prospects to migrate to the US compared to women who possess similar prospects. The possession of individual endowments alone does not necessarily lead to migration; rather, it is the combined possession and interplay of various endowments that drive into migration. For instance, an individual with higher education but lacking social connections may meet challenges in relocating abroad due to limited social networks and support. However, family capital, measured by land holding size is not a strong facilitator of migration. Therefore, labour mobility and enlarged choices after acquiring human and social capital can be examined empirically in this model.

The next chapter is devoted to presenting the impact of emigration from Kerala to the US on emigrant households.

IMPACT OF EMIGRATION

-
- *Introduction.*
 - *Impact of Emigration on Asset Holding: An Inter-Analysis.*
 - *Impact of Emigration on Changes in Asset Holding in the Post-Migration Period: An Intra-Analysis.*
 - *Impact of Emigration on the Standard of Living: An Inter- Analysis.*
 - *Impact of Emigration on the Standard of Living of Different Religious Communities: An Intra-Analysis.*
 - *Conclusion.*
-

7.1. Introduction.

This chapter aims to evaluate the impact of emigration on migrant households. The first part of this chapter examines the impact of emigration on the asset holdings of migrant households, considering the asset holdings of both migrant and non-migrant households (inter-group analysis) to estimate the overall impact. This kind of analysis is essential to identify disparities and evaluate the relative economic benefits of migration. This comparison offers a broad understanding of how emigration influences financial stability and asset accumulation within the broader community. Moreover, the pre- and post-migration asset holdings of migrant households are also examined. Studying the pre- and post-migration asset holdings of migrant households is crucial to understanding the financial progression and economic benefits derived through migration. This analysis helps to assess the direct impact of migration on household wealth accumulation and economic stability. The second part of this chapter explores the impact of migration on the standard of living of migrant households compared to non-migrant households. An analysis is also conducted to check whether there are any significant differences in the standard of living among different religious communities within the migrant group. This examination may provide a comprehensive understanding of how emigration affects asset holdings and the standard of living of migrant households.

7.2. Impact of Emigration on Asset Holding: An Inter-Analysis.

The study examined both migrant and non-migrant households, assigning particular emphasis on the overall assets held by each category. To measure the economic impact of emigration, the researcher precisely gathered data on the total assets possessed by both migrant and non-migrant households. Consequently, the total values of assets were computed by using the information provided by these households. To ensure the selection of the appropriate statistical test, a normality test was conducted and the results are displayed in Table (7.1)

Table.7.1**Asset Holding: Migrant Households vs Non-Migrant Households.**

	Mean Asset Value	Std. Deviation	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
			Statistic	Df	Sig.	Statistic	Df	Sig.
Total Asset Value	1889097.77	3350229.513	.287	358	.001	.599	358	.001

Source: Computed from Primary Survey, 2023

a. Lilliefors Significance Correction

Both the Kolmogorov-Smirnov and Shapiro-Wilk tests rejected the null hypothesis of normality ($P = 0.001$ for both tests) for the asset values of migrant and non-migrant households, indicating non-normal distribution. Therefore, the Mann-Whitney U test has been applied (since there are two groups) to investigate whether there is any significant difference in the total asset holding between migrant and non-migrant households. The results of the Mann-Whitney U test are presented in Table 7.2. The null hypothesis posited for this test is that there is no improvement in the asset holdings of migrant households due to emigration.

Table.7.2**Impact of Emigration on the Asset Holding: Migrant Households vs Non-Migrant Households.**

Descriptive Statistics					
	N	Mean	Std. Deviation	Minimum	Maximum
Total Asset Value	358	1889097.77	3350229.513	3500	22115500
Status of Migration	358	0.399	0.4905	0	1
Ranks					
	Status of Migration	N	Mean Rank	Sum of Ranks	
Total Asset Value	Non-Migrant Households	215	128.37	27598.5	
	Migrant Households	143	256.38	36662.5	
	Total	358			
Test Statistics ^a					
				Total Asset Value	
Mann-Whitney U				4378.500	
Wilcoxon W				27598.500	
Z				-11.470	
Asymp. Sig. (2-tailed)				.001	

Source: Computed from Primary Survey, 2023

a. Grouping Variable: Status of Migration

The descriptive statistics show that (Table 7.2) the mean asset value of both migrant and non-migrant households is worth rupees 1889097.77 with a Standard Deviation of 3350229.513. Mann-Whitney U test was performed to evaluate whether there is any significant difference between the total asset holding of migrant and non-migrant households. The result indicated that the total value of assets of migrant households is significantly higher than that of non-migrant households, $Z = -11.470$, $P = 0.001$. The mean rank of the asset value of migrant households is 256.38 and for non-migrant households is 128.37. The test suggests that emigration leads to improved asset holdings for migrant households with some economic implications. Therefore, the null hypothesis is rejected, and the alternative hypothesis is accepted. The higher total asset values among migrant households may be due to factors such as remittances from abroad, diverse investment opportunities and differences in employment and income levels.

7.3. Impact of Emigration on Changes in Asset Holding in the Post-Migration Period: An Intra-Analysis.

This section employs a dual-phase methodology to compare the pre and post-migration periods to assess changes in the asset holding of migrant households. A normality test was performed on the total asset values for both the pre and post-migration periods to determine an appropriate statistical test. The descriptive statistics of asset holdings and the normality test results for the pre-migration period are shown in Tables 7.3 and 7.4, respectively. In the same way, Tables 7.5 and 7.6 present the descriptive statistics of asset holdings and the normality test results for the post-migration period.

The descriptive statistics of total asset value during pre- migration period are displayed in Table 7.3. The mean value of total assets during pre-migration is 4022283.22 with a standard deviation of 4303772.78. The data on asset holdings show significant variability with a wide range between the minimum and maximum values.

Table.7.3
Asset Holding: Pre-Migration Period.

Descriptives			Statistic	Std. Error
Total Asset Value Before Migration	Mean		4022283.22	359899.560
	95% Confidence Interval for	Lower Bound	3310829.81	
		Upper Bound	4733736.62	
	5% Trimmed Mean		3602106.64	
	Median		2570500.00	
	Variance		18522460160420.600	
	Std. Deviation		4303772.78	
	Minimum		1000	
	Maximum		21965500	
	Range		21964500	
	Interquartile Range		4444500	
	Skewness		1.529	.203
	Kurtosis		2.030	.403

Source: Computed from Primary Survey, 2023

Table.7.4.
Test of Normality.

	Kolmogorov-Smirnov^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
Total Asset Value Before Migration	0.191	143	0.001	0.818	143	0.001

Source: Computed from Primary Survey, 2023

a. Lilliefors Significance Correction

Table 7.4 shows the normality test result of asset holding during the pre-migration period. Both the Kolmogorov-Smirnov and Shapiro-Wilk tests have rejected the null hypothesis of normality ($P = 0.001$ for both tests) for the asset values during the pre-migration period indicating a non-normal distribution. This non-normality suggests that the asset holdings are not symmetrically distributed

around the mean and may contain outliers or skewness. Consequently, non-parametric statistical methods may be more appropriate.

Table.7.5
Asset Holding: Post-Migration Period.

Descriptives			Statistic	Std. Error
Total Asset Value After Migration	Mean		4232856.64	362049.342
	95% Confidence Interval for Mean	Lower Bound	3517153.52	
		Upper Bound	4948559.76	
	5% Trimmed Mean		3826570.12	
	Median		2770500.00	
	Variance		18744400815571.700	
	Std. Deviation		4329480.433	
	Minimum		3500	
	Maximum		22115500	
	Range		22112000	
	Interquartile Range		4401500	
	Skewness		1.481	.203
	Kurtosis		1.893	.403

Source: Computed from Primary Survey, 2023.

The descriptive statistics of total asset value during post- migration period are displayed in Table 7.5. The mean value of total assets during post-migration is 4232856.64 with a standard deviation of 4329480.43. The data on asset holdings during the post-migration period show significant variability with a wide range between the minimum and maximum values.

Table.7.6
Test of Normality.

	Kolmogorov-Smirnov^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
Total Asset Value After Migration	0.179	143	.001	0.829	143	.001

Source: Computed from Primary Survey, 2023

a. Lilliefors Significance Correction

Table 7.6 shows the normality test result of asset holding during the post-migration period. Both the Kolmogorov-Smirnov and Shapiro-Wilk tests have rejected the null hypothesis of normality ($P = 0.001$ for both tests) for the asset values during the post-migration period, indicating a non-normal distribution. Therefore, the Wilcoxon signed rank test has been applied to investigate any significant difference in the total asset values during the pre and post-migration period. The descriptive statistics and the Wilcoxon signed rank test results are presented in Tables 7.7 and 7.8 respectively. The null hypothesis proposed for this test is that there is no improvement in the asset holdings of migrant households due to emigration.

Table.7.7

**Impact of Emigration on Asset Holding
During Post-Migration: An Intra-Analysis.**

Descriptive Statistics					
	Number	Mean	Std. Deviation	Minimum	Maximum
Total Asset Value Before Migration	143	4022283.22	4303772.78	1000	21965500
Total Asset Value After Migration	143	4232856.64	4329480.43	3500	22115500
Ranks					
		Number	Mean Rank	Sum of Ranks	
	Negative Ranks	0 ^a	0.00	0.00	
Total Asset Value After Migration - Total Asset Value Before Migration	Positive Ranks	143 ^b	72.00	10296.00	
	Ties	0 ^c			
	Total	143			

Source: Computed from Primary Survey, 2023.

The descriptive statistics show that the mean asset value during the pre-migration period is 4022283.22 with a standard deviation of 4303772.78 and the post-migration period is 4232856.64 with a standard deviation of 4329480.43.

- a. Total Asset Value after Migration < Total Asset Value before Migration
- b. Total Asset Value after Migration > Total Asset Value before Migration
- c. Total Asset Value after Migration = Total Asset Value before Migration

The Wilcoxon signed-rank test results are presented through the rank sums for negative and positive differences in paired observations. All observations are categorised into negative ranks (0^a) and positive ranks (143^b). The negative ranks sum to 0.00 and the positive ranks sum to 10296.00, suggesting that for most cases, the total asset value of migrant households after the migration is greater than the total asset value before the migration.

Table.7.8
Wilcoxon Signed Rank Test Results.

Test Statistics^a	
Total Asset Value after Migration - Total Asset Value before Migration	
	Migration
Z	-10.409 ^b
Asymp. Sig. (2-tailed)	.001
R	0.62

Source: Computed from Primary Survey, 2023

The result of the Wilcoxon signed rank test (Table.7.8) indicates that the total value of assets during the post-migration period is significantly higher than that of the pre-migration period, $Z = -10.409$, $P = 0.001$ with a large effect ($r = 0.62$). Pre and post-analysis using the Wilcoxon rank sum test suggests that there are improvements in the asset holdings of migrant households due to emigration, thus, the null hypothesis is rejected and the alternative hypothesis is accepted. The social infrastructures of Kerala produce high human capital, enabling migration to international labour markets. Data analysis supports Amartya Sen's development theories in the context of migration, indicating that migration helps people to accumulate skills, expand their choices and increase their earning capacity in developed countries. This, in turn, leads to a spillover effect on households residing in Kerala, influencing economic opportunities and social dynamics locally. The observed increase in asset holdings during the post-migration compared to the pre-migration period has significant economic implications. The results signify enhanced wealth accumulation, potentially offering greater financial stability and flexibility to the migrant households against economic uncertainties. The newly acquired wealth may open avenues for increased investment opportunities,

positively impacting creditworthiness and fostering entrepreneurial activities. Furthermore, the rise in asset holdings may stimulate consumer spending, contributing to economic growth and local development in the Kerala economy via multiplier and accelerator channels.

7.4. Impact of Emigration on the Standard of Living: An Inter-Analysis.

An analysis will be conducted to determine whether there are any significant differences in the standard of living between migrant and non-migrant households. Since the households have been reluctant to reveal their actual income, the total annual consumption expenditures are taken as a proxy for the standard of living. So the real purchasing power of migrant households relative to non-migrant households may be underestimated when we elicit income information. To determine the appropriate statistical test, a normality test was used. The normality test results for annual consumption expenditure of migrant and non-migrant households, migrant households alone, and non-migrant households alone are shown in Tables 7.9, 7.10, and 7.11, respectively.

Table.7.9

Annual Consumption Expenditure: Migrant Households vs Non-Migrant Households.

Series	Consumption Expenditure of both migrant and Non-Migrant HH
Samples	358
Observations	358
Mean	182875.7
Median	167000.0
Maximum	390000.0
Minimum	44000.0
Standard Deviation	83311.44
Skewness	0.489946
Kurtosis	2.498380
Jarque-Bera (J-B)	18.07616
Probability	0.000119

Source: Computed from Primary Survey, 2023

The results (Table. 7.9) of the J-B test reveal that the annual consumption expenditure of both migrant and non-migrant households is not normally distributed, Chi-square (J-B) = 18.07616 and P = 0.0001. The positive skewness (0.4899) implies a right-skewed distribution and the kurtosis (2.4983) indicates heavier tails than a normal distribution. The median (167000) and mean (182875.7) reveal trends about central tendency.

Table.7.10

Annual Consumption Expenditure: Migrant Households.

Series	Consumption Expenditure of Migrant HH
Sample	358
Observations	143
Mean	253597.9
Median	260000.0
Maximum	390000.0
Minimum	130000.0
Standard Deviation	67713.00
Skewness	0.110670
Kurtosis	2.143935
Jarque-Bera (J-B)	4.658452
Probability	0.046371

Source: Computed from Primary Survey, 2023

The results (Table. 7.10) of the J-B test reveal that the annual consumption expenditure of migrant households is not normally distributed, Chi-square (J-B) = 4.658452 and P = 0.0463. The positive skewness (0.1106) implies a right-skewed distribution and the kurtosis (2.1439) indicates heavier tails than a normal distribution. The median (260000) and mean (253597.9) reveal a trend about central tendency.

Table.7.11
Annual Consumption Expenditure: Non-Migrant Households.

Series	Consumption Expenditure of Non-Migrant HH
Sample	358
Observations	215
Mean	135837.2
Median	137000.0
Maximum	330000.0
Minimum	44000.00
Standard Deviation	54508.89
Skewness	0.564588
Kurtosis	3.286818
Jarque-Bera (J-B)	12.15918
Probability	0.002289

Source: Computed from Primary Survey, 2023

The results (Table. 7.11) of the J-B test reveal that the annual consumption expenditure of non-migrant households is not normally distributed, Chi-square (J-B) = 12.15918 and P = 0.0022. The positive skewness (0.5645) implies a right-skewed distribution and the kurtosis (3.2868) shows heavier tails compared to the normal distribution. The median (137000) and mean (135837.2) reveal information about central tendency. Therefore, the Mann-Whitney U test has been applied to investigate any significant difference in the annual consumption expenditure (standard of living) between migrant and non-migrant households. The null hypothesis stated for this test is that there is no improvement in the standard of living of migrant households due to emigration. This test examines a variable denoted as 'CE', representing Consumption Expenditure and 'MIG', indicative of the Status of migration (migrant and non-migrant households). The results of the Mann-Whitney U test are presented in Table 7.12.

Table.7.12**Impact of Emigration on the Standard of Living: Migrant Households vs Non-Migrant Households.**

Descriptive Statistics					
Variables	N	Mean	Std. Dev.	Minimum	Maximum
Annual Consumption Expenditure	358	182875.7	83311.44	44000	390000
Status of Migration	358	0.399441	0.4904691	0	1
					Ranks
Categories of migration		N	Mean Rank	Sum of Ranks	
Consumption Expenditure (CE)	Non-Migrants	215	120.84	25981.00	
	Migrants	143	267.69	38280.00	
	Total	358			
Test Statistics^a					
			Consumption Expenditure		
Mann-Whitney U			2761.000		
Wilcoxon W			25981.000		
Z			-13.151		
Asymp. Sig. (2-tailed)			0.001		

a. Grouping Variable: Migration Status (MIG)

Source: Computed from Primary Survey, 2023

The descriptive statistics show that (Table 7.12) the average annual consumption expenditure of both migrant and non-migrant households is 182875.7 with a Standard Deviation of 83311.44. Mann-Whitney U test was performed to evaluate whether there is any significant difference in the annual consumption expenditure (standard of living) between the migrant and non-migrant households. The mean rank of annual consumption expenditure of migrant households is 267.69 and for non-migrant households is 120.84. The result indicates that the annual consumption expenditure (standard of living) of migrant households is significantly higher than that of non-migrant households, $Z = -13.151$, $P = 0.001$. Therefore, it is

advisable to reject the null hypothesis and conclude that emigration improves the standard of living of migrant households.

If the consumption expenditures of migrant households (which reflect their standard of living) are higher than those of non-migrant households, the same may lead to various economic implications. Emigrant households are increasing their standard of living by having plenty of remittances sent by their family members. Higher consumer expenditures of migrant households could help local economies by increasing the demand for goods and services, which would benefit regional businesses. The exposure to developed countries in terms of facilities and the standard of living they enjoy has led to a standard of living spillover to families in Kerala, as they attempt to imitate similar lifestyles. Consequently, this also leads to human development enhancement for the migrants, their households and close relatives.

7.5. Impact of Emigration on the Standard of Living of Different Religious Communities: An Intra-Analysis.

In this section, an attempt has been made to compare the annual consumption expenditure (standard of living) of three religious groups such as Hindus, Christians and Muslims among the migrant households. Since the number of categories is more than two, the Mann-Whitney test cannot be used. As a result, the Kruskal-Wallis test, a non-parametric alternative to the ANOVA test can be used. The descriptive statistics and the results of the Kruskal-Wallis test are presented in Tables 7.13 and 7.14 respectively. The null hypothesis in this case states that there is no difference in the standard of living among different religious communities within the migrant households.

Table.7.13**Impact of Emigration on the Standard of Living of Different Religious Communities: An Intra-Analysis.**

Descriptive Statistics								
	N	Mean	Std. Deviation	Mini.	Maxi.	Percentiles		
						25th	50th (Median)	75th
Consumption Expenditure	143	253597.9	67713	130000	390000	192000	260000	290000
Religion	143	1.71	0.555	1	3	1	2	2
Ranks								
	Religion			N	Mean Rank			
Consumption Expenditure (CE)	Hindus			49	64.53			
	Christians			87	74.43			
	Muslims			7	94.14			
	Total			143				

Source: Computed from Primary Survey, 2023

Table 7.13 shows that the mean rank of annual consumption expenditure for Hindus is 64.53, for Christians, it is 74.43 and for Muslims 94.14. Thus, there is insufficient evidence to show statistically significant disparities in the ranks of annual consumption expenditures among Hindu, Christian and Muslim migrant households.

Table.7.14**Kruskal-Wallis Test Results.**

Test Statistics^{a,b}	
	Consumption Expenditure (CE)
Chi-Square	3.893
Df	2
Asymp. Sig.	.143

a. Kruskal Wallis Test
b. Grouping Variable: Religion

Source: Computed from Primary Survey, 2023

Kruskal Wallis Test was used to assess the significant difference in the annual consumption expenditure (standard of living) of different religious groups

within migrant households. Table 7.14 reveals the Kruskal Wallis test results. It shows that there is no significant difference in the annual consumption expenditure (standard of living) of different religious groups within the migrant households, Chi-square (2, N=143) = 3.893, P = 0.143.

7.5.1. Impact of Emigration on the Standard of Living: Hindu vs Muslim Migrant Households.

This analysis compares the annual consumption expenditure (standard of living) between Hindu and Muslim migrant households. It aims to understand how emigration affects the standard of living differently for Hindus and Muslims. Since there are two categories, the Mann-Whitney U test can be used. The results of the Mann-Whitney U test are presented in Table 7.15.

Table.7.15
Impact of Emigration on the Standard of Living: Hindu vs Muslim Migrant Households.

	N	Mean	Std. Deviation	Mini.	Maxi.
Annual Consumption Expenditure	56	163535.71	76030.84	45000.0	376000.0
Religion	56	1.250	.6674	1.0	3.0
					Ranks
Religion			Number	Mean Rank	Sum of Ranks
Annual Consumption Expenditure		Hindus	49	27.97	1370.50
		Muslims	7	32.21	225.50
		Total	56		
Test Statistics					
				Annual Consumption Expenditure	
Mann-Whitney U				145.5	
Wilcoxon W				1370.5	
Z				-0.644	
Asymp. Sig. (2-tailed)				0.519	
Exact Sig. [2*(1-tailed Sig.)]				.528b	
a Grouping Variable: Religion.					
b Not corrected for ties.					

Source: Computed from Primary Survey, 2023

The descriptive statistics show that (Table 7.15) the mean annual consumption expenditure of both Hindu and Muslim migrant households is 163535.71 with a Standard Deviation of 76030.84. Mann-Whitney U test is executed to assess whether there is any significant difference in the annual consumption expenditure (standard of living) between the Hindu and Muslim migrant households. The mean rank of annual consumption expenditure for Hindu migrant households is 27.97 and for Muslim migrant households, it is 32.21. The Mann-Whitney result indicates that there is no significant difference in the annual consumption expenditure (standard of living) between Hindu and Muslim migrant households, $Z = -0.644$, $P = 0.519$.

Table.7.16

Impact of Emigration on the Standard of Living: Christian vs Muslim Migrant Households.

This part examines the impact of emigration on the standard of living of both Christian and Muslim migrant households. Since the number of categories is two, the Mann-Whitney U test is employed. The descriptive statistics and the results of the Mann-Whitney U test are displayed in Tables 7.16 and 7.17, respectively.

	N	Mean	Std. Deviation	Mini.	Maxi.
Annual Consumption Expenditure	94	144792.55	54172.48	44000.0	286000.0
Religion	94	2.074	.2639	2.0	3.0
Ranks					
		Religion	Number	Mean Rank	Sum of Ranks
Annual Consumption Expenditure		Christians	87	46.45	4041.50
		Muslims	7	60.50	423.50
		Total	94		

Source: Computed from Primary Survey, 2023

Table.7.17
Mann-Whitney U Test Results.

Test Statistics^a	Annual Consumption Expenditure
Mann-Whitney U	213.500
Wilcoxon W	4041.500
Z	-1.311
Asymp. Sig. (2-tailed)	.190

Source: Computed from Primary Survey, 2023

a. Grouping Variable: Religion

The mean rank of annual consumption expenditure for Christian migrant households is 46.45 and for Muslim migrant households is 60.50 (Shown in Table 7.16). The Mann-Whitney result indicated that there is no statistically significant difference in the annual consumption expenditure (standard of living) between Christian and Muslim migrant households, $Z = -1.311$, $P = 0.190$ (Table 7.17).

Table.7.18
Impact of Emigration on the Standard of Living: Hindu vs Christian
Migrant Households.

	N	Mean	Std. Deviation	Mini.	Maxi.
Annual Consumption Expenditure	136	150018.38	64557.53	44000.0	376000.0
Religion	136	1.640	.4819	1.0	2.0
Ranks					
Religion		Number	Mean Rank	Sum of Ranks	
Annual Consumption Expenditure	Hindus	49	73.98	3625.00	
	Christians	87	65.41	5691.00	
	Total	136			

Source: Computed from Primary Survey, 2023

This part examines the impact of emigration on the standard of living of Hindu and Christian migrant households. To assess whether there is any significant

difference in the annual consumption expenditure between these two groups, the Mann-Whitney U test is used. The descriptive statistics and the result of the Mann-Whitney U test are shown in Tables 7.18 and 7.19 respectively.

The results presented in Table 7.18 show that the mean annual consumption expenditure of both Hindu and Christian migrant households is 150018.38 with a Standard Deviation of 64557.53. The mean rank of annual consumption expenditure for Hindu migrant households is 73.98 and for Christian migrant households is 65.41.

Table.7.19
Mann-Whitney U Test Results.

Test Statistics ^a	Annual Consumption Expenditure
Mann-Whitney U	1863
Wilcoxon W	5691
Z	-1.217
Asymp. Sig. (2-tailed)	0.223

Source: Computed from Primary Survey, 2023

a.Grouping Variable: Religion

The Mann-Whitney result (Table 7.19) indicates that there is no statistically significant difference in the annual consumption expenditure (standard of living) between Hindu and Christian migrant households, $Z = -1.217$, $P = 0.223$. Thus, the results of the intra-group analysis on the impact of emigration across different religious communities collectively support the acceptance of the null hypothesis, which states that there is no difference in the standard of living among various religious communities within migrant households.

The results of the intra-analysis of the impact of emigration on different religious groups suggest that these religious groups (despite coming from different cultural and religious backgrounds) have similar spending habits (standard of living). It may be due to factors such as exposure to a common economic environment and shared socio-economic characteristics or patterns of integration among the migrant communities. Migrant households to the US often experience a

better status and standard of living, like better access to economic opportunities, improved education and better healthcare. The prospect of a higher income and improved quality of life contributes to the positive impact of migration on household well-being (positive spillover effect). Another possible reason for this finding is that migrant households from different religious backgrounds have similar economic conditions, indicating that they have similar opportunities. All these results suggest that variables other than religious affiliation play a crucial role in equalising the similar standard of living among these different religious groups.

There is a clear disparity in the level of standard of living between migrant and non-migrant households based on the significant variations in annual consumption expenditure. These results suggest that economic factors and lifestyle choices are significantly influenced by migration. Migrant households possibly experiencing changes in purchasing patterns relative to non-migrant households, thereby indicating an improvement in the standard of living. When comparing Hindu, Christian and Muslim migrant households, there is no statistically significant difference in annual consumption expenditure (standard of living). This result shows that there is some economic convergence among these religious groups in the migration environment. This result helps the policymakers to concentrate on more general factors like occupation, education and socio-economic status when framing policies for this diverse group of migrants. A level of social integration and cultural assimilation among the migrant community may also be shown by the convergence of consumption patterns among Hindu, Christian and Muslim migrant households.

7.6. Conclusion.

The non-parametric tests, such as the Kruskal-Wallis test, Mann-Whitney U test and Wilcoxon rank sum test reveal that migrant households have a statistically significant improvement in asset holdings and standard of living compared to non-migrant households. Thus the overall results highlight that there are improvements in the asset holdings and standard of living of migrant households due to emigration. This difference is attributed to the efforts of migrants to maximise their utility by pursuing the best possible economic opportunities. These opportunities are

facilitated by the enhanced choices provided by the education system and healthcare infrastructure of the economy of Kerala. They enhance human capital in them through the subsidised education and healthcare facilities they have. The recurrent governments of Kerala invested with enough foresight in healthcare and education and it led to human capital formation among the adults in various walks of life. With the human capital endowment, the adults, the sample suggested, endeavored to reach out to their best possible economic pursuit by heeding attention to the demand for labourers from the international labour market. The Wilcoxon rank test is exclusively used to examine any significant difference in the asset holdings during the pre and post-migration period. The results show that the accumulation of assets by households has improved significantly after migration. Hence, the results reveal that human development in Kerala, with the impetus of large-scale subsidised education and healthcare access, coupled with migration, has brought about a significant shift in people's standard of living and the enlargement of their choices.

Migration, particularly to destinations like the United States, often brings significant economic benefits for migrants and their households. Research indicates that households with members abroad tend to experience improvements in asset accumulation, income levels and overall economic well-being. Remittances sent by migrants contribute substantially to the financial stability of their families left behind, enabling them to invest in education, healthcare and other avenues for socio-economic advancement. This influx of funds often leads to an enhancement in the standard of living, providing families with access to better housing, healthcare and educational opportunities. Additionally, migration can lead to the acquisition of new skills and experiences, which can further enhance the economic prospects of both migrants and their families left behind. For example, migrants may gain access to better job opportunities abroad, leading to increased earning potential and long-term financial security for their households. However, the notable finding is that the intra-group analysis of the standard of living among different religious groups within migrant households shows no statistically significant differences in their standard of living.

In addition to economic gains, migration can also yield various social benefits for migrant households. Migrating to countries like the United States often results in an improvement in social status and overall quality of life for migrants. The ability to secure better employment opportunities and access to advanced healthcare and education systems contributes to an enhanced sense of well-being and social integration. Moreover, the acquisition of new skills and exposure to diverse cultures often fosters personal growth and broadens one's social network, leading to increased social capital and opportunities for personal development.

However, along with these economic and social benefits, migration also brings about various negative social effects, particularly for the families left behind. The physical separation from migrating family members can lead to loneliness, isolation and emotional distress among parents and other family members (Sujathan, 2012; Sanitha & Noushad, 2018; Kaur & Sinha, 2023). Moreover, the absence of caregivers within the family due to migration can aggravate health problems and mental illnesses among the elderly parents left behind. Similarly, wives and other primary family members left behind may experience similar mental and physical trauma (Sujathan, 2012; Sanitha & Noushad, 2018). Thus, while migration offers economic and social opportunities, it is crucial to address the negative social consequences and provide comprehensive support systems for families affected by migration.

The final chapter of this study presents its key findings and conclusions. It provides a clear summary of the main findings and offers policy recommendations and suggestions.

FINDINGS AND CONCLUSION

-
- *Introduction.*
 - *Major Findings.*
 - *Policy Implications.*
 - *Scope for Further Research.*
 - *Conclusion.*
-

8.1 Introduction.

Migration has been an inevitable episode of human history, driven by aspirations for better living conditions, economic opportunities and societal factors (World Bank 2005). In general, the United States stands as a primary destination for migrants and it offers a promise of prosperity, socio-economic integration and a variety of cultures. The route of Indian migration to the United States has evolved over centuries, starting from humble beginnings with low-skilled labourers to a significant demographic force, particularly since the mid-20th century. In 1960 the number of Indian immigrants living in the US was 12,000, comprising 0.5% of the overall immigrant population in the USA, then this number increased to 2700000 in 2020 (UN, 2020).

Kerala was traditionally characterised by internal migration and witnessed a shift towards external migration, especially among its educated people, marking a remarkable change in its emigration dynamics (Zachariah et al., 1999). According to the Kerala Migration Survey (KMS) of 2018, the total number of Keralites living and working abroad stands at 2,121,887, reflecting a decrease of 2.87 lakhs compared to the figures reported in 2013 (Rajan & Zachariah, 2018). The distribution of Kerala expatriates in 2018 reveals that 39.1% reside in the UAE, 23% in Saudi Arabia, and 2.2% in the USA. Notably, when we consider emigration to regions outside the Gulf, the percentage of Kerala's migration to the USA remains notably high (Rajan & Zachariah, 2018). The attraction of the American dream has led to a substantial flow of migrants, particularly from districts like Pathanamthitta and Kottayam, as reported by the Kerala Migration Survey of 2018.

The data for this study is sourced from the Kerala Migration Survey (KMS), 2018 conducted by the Centre for Development Studies in Thiruvananthapuram, Kerala. The research focuses on two districts of Kerala, namely Pathanamthitta and Kottayam. These districts were selected due to their substantial number of emigrants to the US compared to other regions (Rajan & Zachariah, 2018). Several factors contribute to the high emigration rates observed in Pathanamthitta and Kottayam. Historically, these districts have boasted better access to education and higher

literacy rates, which facilitate opportunities abroad. Moreover, there exists a robust tradition of migration within these communities, supported by established networks that ease the transition for new emigrants.

The study examines the socio-economic characteristics, as well as the disparities in living standards and asset ownership, between the US migrant households and non-migrant households. This analysis aims to understand the impact of emigration on migrant households. In Pathanamthitta, the sample includes 210 households, comprising 88 US migrant households and 122 non-migrant households. Similarly, in Kottayam, the sample consists of 148 households with 55 US migrant households and 93 non-migrant households. Thus, the total sample size for the study is 358 households, covering 143 migrant households and 215 non-migrant households.

8.2 Major Findings.

1. To Analyse the Socio-Economic Characteristics of both Migrants and Non-Migrants.

This objective aims to explore the socio-economic characteristics of both migrants and non-migrants in Kerala. The first part of this objective focuses on migrants, examining some characteristics such as age, sex, marital status, religion and other related factors. The second part examines the socio-economic characteristics of non-migrants such as age, sex, marital status, religion, occupation etc...

Characteristics of Migrants.

- The age-wise classifications of emigrants reveal that the most prevalent age among migrants is 30, comprising 13.29% and age groups 28 and 35 also exhibit significant frequencies, accounting for 11.89% and 7.69% of total emigrants respectively. Notably, younger age groups display higher emigrant counts. Apart from this, age groups 36, 41, 42, 43, 44, and 51 have negligible proportion, each contributing less than 1% to the overall emigrant population.

- Age groups such as 30, 28 and 35, hold significant dominance in the emigration trend. These results suggest the labour market dynamics of both home and destination regions, influence workforce availability and skill distribution. Another fact is that the age distribution indicates a high chance for the skill drain, impacting the availability of expertise in the homeland. The age structure of emigrants may influence the dependency ratio, population ageing and the associated economic challenges in the state of Kerala.
- Males dominate in emigration from Kerala to the US, comprising 84.62%, while females represent only 15.38%. As more men sought opportunities abroad, it resulted in changes in family structures, roles and responsibilities, with women potentially taking on more traditional domestic roles in the absence of male family members.
- Religious distributions of emigrants show that Christians comprise the majority with 60.84% followed by Hindus at 34.26% and Muslims at 4.9% of the total emigrant population from Kerala.
- Social networks and opportunities established by Christian communities in the destination country may contribute to their dominance in the emigration process. Additionally, the factors such as the acquisition of specific qualifications suitable for the labour market of the US and job opportunities in sectors with ties to Christian communities could also play a role in their higher representation.
- The majority of emigrants are married, comprising 65.73%, while unmarried individuals represent a smaller portion, accounting for only 32.87%. There is a minimal representation of widows/widowers and divorced individuals, each accounting for only 0.7% each. This trend in migration may lead to family separation, with one partner

migrating while spouses and children are left behind, leading to emotional strains and mental problems.

- Married migrants may face increased pressure to succeed economically in the US and send remittances regularly to support the livelihoods of their families in Kerala, enhancing both local economies and developmental initiatives.
- The education pattern of the migrants shows that the majority of emigrants hold postgraduate (PG) qualifications, accounting for 63.63% of the emigrants, while individuals with undergraduate degrees (UG) represent 24.48%. A smaller percentage (11.19%) of emigrants acquired technical education. The emigrants who possess other educational qualifications, such as Ph.D and M.Phil, account for only 0.70% of the emigrant population.
- The educational diversity among emigrants highlights the predominance of highly educated individuals, particularly those with postgraduate qualifications (PG). The high percentage of qualified individuals suggests a potential brain drain effect, leading to a shortage of skilled professionals in Kerala. This trend could significantly impact local industries and developmental initiatives, as the loss of skilled professionals may hinder innovations and economic growth.
- Occupational distributions of the migrants show that nurses represent the largest occupation among the migrants, comprising 13.28% which highlights that the demand for healthcare professionals in the US labour market is significantly high. Similarly, accountants follow closely behind at 9.80%, indicating a need for financial expertise and management within the migrant workforce, while lab technicians make up 6.99% of total migrants, suggesting a demand for individuals with skills in laboratory science and analysis.

- Certain occupations such as animal nutritionists, company lawyers, doctors, hospital assistants, managing staff, quality controllers and supervisors, each comprising less than 2% of the total. It indicates potential barriers to entry or limited demand in these fields for migrant workers in the US labour market.
- When it comes to the status of citizenship, 74.13% of emigrants from Kerala did not acquire US citizenship, while 25.87% obtained citizenship. Acquisition of citizenship may contribute to the problem of ‘brain drain’, impacting local economic and professional development. The small percentage of migrants without citizenship suggests various possibilities, including facing barriers to citizenship acquisition, retaining cultural connections and planning to return to Kerala.
- The location of emigrants in the US shows diverse concentrations with Georgia standing out with the highest representation, accounting for 22.38% closely followed by California with 20.98%. New York also exhibits a significant concentration, hosting 13.99% of migrants. These concentrations suggest that factors like job opportunities, community networks and regional preferences often influence the selection of the local destination within the hostland.
- The cross-tabulation analysis of gender and education shows that among the PG holders, male dominance is observed at 83.52%, while females account for only 16.48%. Among the total technical degree holders, a similar pattern is observed with males comprising 93.75% and females 6.25%. Males also outnumbered females in undergraduate degree attainment with 82.85% of total degree holders compared to females who represent 17.15% of total degree holders. Overall results show that males generally have higher levels of education than females.

- Gender-wise occupation of the emigrants shows an apparent gender difference across various occupations. Professions like anesthesia technician, animal nutritionist, business, company lawyer, doctor, engineer, legal advisor, managing staff, mechanic, quality controller, supervisor and system analyst are entirely male-dominated with males representing 100% of the workforce. Similarly, a job like a hospital assistant is an exclusive monopoly of females. In occupations such as accountants and nurses, males constitute 71.42% and 68.42% of the workforce respectively, while females make up 28.58% and 31.58% respectively.
- Religious distribution among migrants across different occupations shows that professions like anesthesia technician, animal nutritionist, legal advisor, system analyst, accountant, microbiologist and software engineer are primarily occupied by Christians. Similarly, Hindus are more concentrated in occupations such as company lawyers, hospital assistants, supervisors and nurses. Muslims on the other hand have a lesser presence overall with minimal representation in many professions. These results underline the fact that the presence of established migration networks and communities within certain religious groups play a role in employment opportunities in the country of destination.
- The cross-tabulation results of education and occupations show that occupations like animal nutritionist, business, company lawyer, doctor, hospital assistant etc... are mainly held by individuals with postgraduate degrees (PG), while those in nursing possess a bachelor's degree qualification (UG). For instance, a significant proportion of nurses hold degrees (68.42%) and postgraduate qualifications (31.58%). The result also shows that some individuals have higher educational qualifications than necessary for their

occupation. In the context of migration, this situation is called the 'brain waste' of migration.

- The distribution of migrants in the US varies based on their occupation and citizenship status. Certain professions such as legal advisor and system analyst are completely (100%) occupied by migrants who have obtained citizenship in the US. Similarly, occupations such as anesthesia technician, animal nutritionist, company lawyer, hospital assistant, therapist, quality controller, software engineer, supervisor and pharmacist are solely occupied by migrants who are not citizens, with a 100% non-citizenship rate. Occupations such as accountant, nurse, mechanic, engineer, doctor and lab technician display a mixed composition, comprising both individuals who have acquired US citizenship and those who have not. For instance, 15.79% of nurses have obtained citizenship, while 84.21% have not.

Characteristics of Non-Migrants.

- The age distribution of non-migrants reveals that 94.4% of non-migrants belong to the age group between 20 and 40. A smaller group, constituting 5.6% falls within the age group of 41 to 70. This result shows that the majority of non-migrants belong to the younger to middle-aged group.
- Religious distribution of non-migrants shows that Hindus are the largest religious group, Christians represent a considerable portion and Muslims have a notable share. This result indicates a significant religious diversity among the non-migrant group.
- The gender distribution among non-migrants shows that the majority are males at 78.6%, while females represent only 21.4%. This result points out a notable gender disparity within this demographic group.

- The marital status of non-migrants reveals that a significant portion (64.7%) of individuals are married and unmarried non-migrants account for 33.9%. Furthermore, the widowed and divorced individuals are less common among the non-migrant group.
- The educational profile of non-migrants demonstrates that the majority of non-migrants (53%) have attained a degree-level qualification, indicating a strong emphasis on higher education among non-migrants. Similarly, 18.6% have completed education up to the Plus Two/PDC level, while 14.4% have educational backgrounds categorised as SSLC and below. These findings point out that, even though non-migrants possess higher qualifications, it is not enough to migrate to the US. Migration is influenced not only by educational qualifications but also by other factors such as financial backgrounds and social networks.
- The occupational trend among non-migrants highlights that rubber tapping emerges as the most common occupation (14.5%) closely followed by salesmanship (14%). Likewise, occupations such as cashier or accountant roles (5.6%), construction work (8.3%) and storekeeping (4.6%), represent a mix of employment opportunities in both the agriculture and retail sectors. However, a significant portion of non-migrants (21.8%) are unemployed.
- The cross-tabulation result of gender-wise education shows that out of total male non-migrants, 52.08% hold bachelor's degree qualification, 20.71% possess education up to the Plus Two/PDC level and 15.38% with SSLC and below. Similarly, female non-migrants follow a similar pattern across all educational categories. The result shows that 21.74% of female non-migrants possess postgraduate qualifications, representing a smaller but significant proportion of highly educated women within this group.

- The cross-tabulation result of gender and occupation shows that male dominance is visible in jobs like salesmanship (15.39%) followed by rubber tapping (13.61%), and other jobs (8.87%) such as teaching, lab assistant, nursing, fish stalls, internet cafes, and newsagents etc... On the other hand, female non-migrants are primarily engaged in occupations like rubber tapping (17.40%) and cashier/accountant roles (15.22%). Furthermore, the result also shows that a higher percentage of males are unemployed (22.48%) compared to females (19.55%).
- The cross-tabulation result of religion and occupation shows that Hindu non-migrants are primarily engaged in occupations such as rubber tapping (15.04%), sales roles (13.28%) and other occupations (8.85%) like teaching, lab assistant, nursing, fish stalls, internet cafes, news agencies etc... Similarly, Christian non-migrants are predominantly involved in rubber tapping (33.33%), construction work (17.95%) and other occupations (7.70%). Likewise, Muslim non-migrants are more commonly found in sales positions (19.04%), security roles (9.53%) and construction work (6.35%). The notable fact is that among the religious groups, Hindu non-migrants are experiencing a higher unemployment rate (29.21%) compared to Christians (7.70%) and Muslims (17.45%).
- The cross-tabulation result of occupation and education shows that Professions such as salesman roles, rubber tapping, other jobs and construction work are primarily occupied by bachelor degree holders. This result indicates that there is a mismatch between educational qualifications and job opportunities among the non-migrants. Similarly, individuals with lower educational attainment such as SSLC and below are more found in occupations like rubber tapping and cashier/accountant roles. A significant proportion of unemployed individuals (21.86%) is evident across all education levels,

underlining the challenges faced by non-migrants to convert their educational qualifications into meaningful employment opportunities.

- Interestingly, individuals with postgraduate qualifications are also present in various occupations such as rubber tapping, other professional roles and construction work. It emphasises the low employability of education and the low absorptive capacity of the labour market in Kerala.

2. To Identify the Accelerators and Brake Pedal of the Indian Economy in the Context of Migration.

The second objective of this study focuses on examining the macroeconomic factors that act as both accelerators and brake pedal of emigration from India to the United States. In this context, accelerators are variables that regulate the pace of emigration, while brake pedals are those factors that decrease the pace. By identifying these factors within the Indian context, this analysis aims to offer a broad understanding of the dynamic forces driving migration patterns between India and the United States.

- The Auto Regressive Distributed Lag Model (ARDL) result shows a negative correlation between economic growth in India and emigration from India to the USA. As India marks economic growth, the emigration to the USA decreases. Specifically, a 1% increase in India's economic growth leads to a decrease in emigration by approximately -0.226% in the long run and -0.376% in the short run. This negative correlation suggests that the productivity and prosperity of India improve like anything, individuals are less likely to migrate as they enjoy a higher standard of living within their own country.
- Emigration to the USA correlates positively with human capital development in India, which means a 1% rise in human capital development leads to a 2.024% increase in emigration in the long run

and 0.761% in the short run. Skilled individuals with innovative mindsets are departing from India in search of better opportunities abroad. Limited possibilities for better employment and higher education opportunities within India encourage the migration of skilled workers to the US.

- People migrate overseas looking for advanced skills and improved prospects for a better life. However, the undervaluation of talent even after acquiring skills can drive emigration and is fueled by increased opportunities for labour mobility, better facilities, higher remuneration and an improved standard of living abroad.
- There is a positive correlation between population density in India and emigration to the USA. Specifically, a 1% increase in population density in India leads to a 3.87% rise in emigration in the long run and 1.45% in the short run. Higher population density in a region compels individuals to pursue better job opportunities and a higher standard of living abroad.
- India with its growing population and promising economic growth may face challenges in accommodating its workforce. Despite an increase in skilled jobs in India since the 1990s, there remains an oversupply of skilled labour in the country which encourages migrants to search for opportunities in developed countries, especially in the US labour market.
- The CUSUM and CUSUMsq analysis of ARDL shows the stability of the EMIUS model parameters across most periods, except for 2008, where structural instability was observed, likely due to the global financial crisis.
- The coefficient of determination (R^2 and Adjusted R^2) indicates that approximately 92% of the variation in emigration to the US is

explained by factors like economic growth, human capital development and population density of the Indian economy.

3. To Evaluate the Endowments and Capabilities that help to respond to the Factors Contributing to Migration from Kerala to the US.

The third objective of this study is to examine the influence of various endowments and capabilities on the emigration of people in Kerala. Endowments include individual, social, and family capital that play a determining role in migration. This objective is divided into two parts: firstly, a descriptive analysis to get an initial idea about the relationship between different endowments and migration. Secondly, logistic regression results will be presented to get a better idea of how these endowments impact emigration from Kerala to the United States.

Descriptive Analysis Results of Endowments and Migration.

- In the age group of 20 to 40, non-migrants account for 94.41% of individuals, while migrants represent 75.52%. For the age group 41 to 70, non-migrants make up 5.59% and migrants 24.48%. The largest proportion of migrants (75.52%) falls within the age group of 20 to 40, indicating a clear correlation between age and migration status. These results show that younger people are more likely to migrate compared to older people.
- Among individuals with an SSLC and below qualification, there are 0% migrants and 14.40% non-migrants. This result indicates a lower likelihood of emigration for those with lower education levels. For individuals with a Plus Two/PDC qualification, there are 18.60% non-migrants and 0% migrants. It demonstrates a similar trend in SSLC and below categories. Among the migrants, 24.48% hold a bachelor's degree, while 53% of non-migrants possess the same qualification, suggesting a higher propensity for migration among

degree holders. Similarly, with a postgraduate degree, there are 63.63% migrants and 14% non-migrants. This underlines that persons with bachelor's degrees and postgraduate degrees have a higher probability of migrating than people with less education.

- The gender-wise distribution shows that males exhibit a higher likelihood of migration compared to females, with 84.62% of migrants being males and only 15.38% being females. Similarly, among non-migrants, 78.60% are males and 21.40% are females, indicating a higher male presence among non-migrants as well. This suggests that men may seek opportunities outside for financial incentives, educational aspirations, personal motivations etc...These findings emphasise that there is a possibility of a shortage of male workers in certain industries, impacting output and productivity in the domestic economy.
- There is a relationship between family assets and the migration of family members. Families with smaller land holdings (1-25 and 26-50 cents) are more common among both migrants and non-migrants. The land ownership groups of 51-100 cents, 101-200 cents, and 201 and above show that the property holding of family influences the migration of family members. In the 51–100 cent range, there are 19.58% migrant and 8.37% non-migrant households.
- Similarly, in the 101–200 cent category, there are 16.08% migrant households compared to only 4.18% non-migrant households. It emphasises a stronger preference for migration among households with larger land holdings. Among households possessing 201 cents and above, there are 1.40% migrant households and no non-migrant households, emphasising the connection between significant land ownership and migration. Overall results show that the probability of migration increases with family land ownership.

- The study finds a correlation between religion and migration. Christians comprise the majority of emigrants to the USA with 60.84% followed by Hindus (34.26%) and Muslims (4.9%). The result shows a clear skewness in migration patterns with Christians representing a major group. This trend may be influenced by various factors such as economic status, educational attainment, and community-specific connections tied to religious affiliations.
- The result of descriptive analysis shows that there is a relationship between migration status and the networks in the US. The majority of non-migrants (82.23%) reported having no networks in the United States, indicating that a significant portion of those who chose not to migrate may lack established social connections or contacts in the US. Similarly, a significant proportion of migrants (67.09%) reported having a network in the USA. It highlights the importance of social networks for individuals who have decided to migrate from Kerala to the US. Having pre-existing networks provides valuable assistance in terms of job opportunities, community integration, and guidance for navigating life in a new country.

Logistic Regression Results on Endowments and Migration

- The logistic regression model is also used in this objective to examine the factors affecting migration of individuals from Kerala to the US, revealing an intercept of -11.592, indicating a very low baseline probability of migration.
- The result shows that a transition from female to male increases the odds of migration by 105.7%, signifying a higher propensity for male migration for employment purposes.
- Being a Christian is an advantageous factor for migration with a 70.4% reduction in the odds of migration for non-Christians, emphasising the influence of religion on migration.

- Social capital, represented by having a network in the US, significantly promotes migration with odds approximately six times higher for individuals with established networks.
- Education serves as a significant factor with each increase in education level associated with approximately a fivefold (more than four times) increase in the odds of migration. It emphasises the influence of human capital in migration.
- Family capital, indicated by land ownership also has a statistically significant role but relatively weak impact on migration odds. Similarly, the variable age has a small effect on the odds of migration.
- Overall results of Logistic Regression show that social and human capital factors, such as social networking, religious affiliation and educational attainment, play crucial roles in shaping migration. The interaction between various endowments, such as human capital, social capital and family capital is essential for facilitating successful migration processes.

4. To Analyse the Impact of Emigration on Migrant Households.

The final objective of this study focuses on assessing the impact of emigration on migrant households. Migration has a significant effect on household assets and the overall standard of living. The first part of this objective examines how migration influences the asset holding of migrant households compared to non-migrant households and also analyses the changes in asset holdings of migrant households during the post-migration period compared to the pre-migration. The second part shows the impact of migration on the standard of living of migrant households.

- The Mann-Whitney U test is used to assess the disparity in the asset holdings between migrant and non-migrant groups. The Mann-

Whitney U statistic shows a substantial difference in the distribution of total assets between migrant and non-migrant households.

- Migrant households, on average, possess higher total assets compared to non-migrant households. The Wilcoxon signed-rank test results reveal that the total asset holdings of migrant households in post-migration are significantly greater than in pre-migration. Migration is shown to be a process that expands the endowments and capabilities of people. All these show the positive impact of migration on migrant households.
- An increase in the asset holdings in post-migration may lead to increased investment opportunities, improved creditworthiness and the promotion of entrepreneurial activities in Kerala. The rise in asset holdings can stimulate consumer spending, thereby contributing to economic growth and local development.
- In terms of annual consumption expenditure (a proxy of standard of living) migrant households generally have a greater standard of living than non-migrant households. The variations in consumption expenditure could be attributed to remittances from migrant family members and access to better job opportunities. This implies that the higher standard of living enjoyed by the migrants in the developed countries has a positive 'spillover effect' on their families in Kerala, which leads to the enlargement of human development for both migrant households and their immediate relatives.
- When it comes to the different religious communities within the migrant groups, Muslim migrant households exhibited the highest mean rank (94.14) followed by Christian migrant households (74.43) and Hindu migrant households (64.53). However, the Kruskal-Wallis test was employed to assess the disparity in the standard of living between Muslim, Christian and Hindu migrant households. The result of this test suggests that there are no significant differences in annual

consumption expenditure (Standard of living) among the three religious groups.

- Analysis of annual consumption expenditure (standard of living) for Hindus and Muslim migrant households shows that Hindus exhibit a slightly lower mean rank (27.97) compared to Muslims (32.21). The Mann-Whitney U test shows that there is no statistically significant difference in annual consumption expenditure (standard of living) between Hindu and Muslim migrant households.
- When it comes to the comparison between Muslims and Christians, the result shows that the mean rank is higher for Muslims compared to Christians, while the sum of ranks is higher for Christians compared to Muslims. The Mann-Whitney test suggests that there is no significant difference in annual consumption expenditure (standard of living) between Christian and Muslim migrant households.
- Study shows that Hindu migrant households have a slightly higher mean rank for annual consumption expenditure compared to Christian migrant households. However, the sum of ranks for Christians is higher than that of Hindus. Mann-Whitney U test suggests that there are no significant differences in the standard of living between Hindu and Christian migrant households.
- Inter-group analysis of asset holding between migrant and non-migrant households reveals that there is a significant growth in the value of asset holding of migrant households compared to the non-migrant households.
- Pre and post-migration analysis of the possession of the assets within the migrant households shows that there is a significant improvement in the asset holding in the post-migration period compared to the pre-migration period.

- Inter-group analysis of the standard of living between migrant and non-migrant households reveals that there is a significant improvement in the standard of living of migrant households compared to non-migrant households.
- The intra-group analysis of the standard of living among the various religious groups shows that there are no significant differences in the standard of living among different religious groups within the migrant households. This implies that, regardless of religious affiliation, migrant households experience similar standards of living due to the migration of family members, indicating leveling effects across religious lines and it suggests that migration to a country like the USA leads to comparable standard of living positions for migrant households, irrespective of their religious background.

8.3. Policy Implications.

The major policy implications of the study are:

- **Strengthen local economies:** Invest in economic development initiatives in Kerala to create job opportunities and reduce the need for migration.
- **Economic Growth Strategies:** Implement policies that promote sustainable economic growth, including infrastructure development, investment in key industries, encourage entrepreneurship and innovation by providing access to financing and regulatory support for new ventures.
- **Create job opportunities:** Develop employment opportunities and skill development programs in the homeland to reduce the economic necessity for migration.
- **Brain Gain Policies:** Develop policies that encourage the return of skilled expatriates by offering attractive incentives to facilitate the

transfer of valuable ideas and knowledge from current migrants to benefit the development of the country.

- **Youth Retention Programs:** Implement targeted youth retention programs that provide incentives for young individuals to stay in the country, such as scholarships, vocational training programs and entrepreneurship support initiatives.
- **Incentives for Returning Emigrants:** Policymakers in the homeland might need to create supportive environments for returning emigrants. This can include offering incentives for business startups, providing tax benefits and other supportive measures.
- **Education and Skill Development:** Strengthen the education system in Kerala by investing in infrastructure, curriculum development and teacher training to ensure high-quality education from primary to tertiary and to higher education levels.
- **Promotion and strengthening of Science and Healthcare Sectors:** Create incentives for research and development in the science and healthcare sectors, such as tax breaks, grants, and funding opportunities for innovative projects and startups. Develop initiatives to attract and retain skilled professionals in science and healthcare fields, including offering competitive salaries, career advancement opportunities and supportive work environments.
- **Expand healthcare infrastructure:** Invest in healthcare facilities and services in Kerala to ensure access to quality healthcare services to the left behind family members.
- **Regional Development Initiatives:** Implement regional development programs that focus on decentralisation and balanced economic growth across different regions to alleviate population pressure in densely populated areas.

- Provide social security measures: Establish social security programs in Kerala to provide financial support and assistance to families affected by migration.
- Provide mental health support: Offer counseling and mental health services to help migrant households to manage the emotional challenges of separation and adjustment.
- Encourage research and knowledge-sharing: Support research initiatives that explore the social impacts of migration on families and communities.

8.4. Scope for Further Research.

Based on the current research, there is much more to explore about migration from Kerala to the United States in various aspects. Here are some of the potential areas ready for further investigation.

- Examine the impact of migration to the US on the labour market in Kerala, including changes in employment patterns, wages and labour force participation rates, particularly in key sectors affected by outmigration.
- Examine the impact of migration from Kerala to the US on the population ageing in Kerala.
- Examine the potential fiscal loss to the state of Kerala due to the migration of skilled people to the US. Consider factors such as the number of migrants, their income levels and the tax revenue they would contribute if they were to stay in Kerala.
- Explore the experiences of women migrants from Kerala to the US, including their challenges, opportunities and contributions to both societies.

- Examine the trends and patterns of student migration from Kerala to the US, including the factors driving migration, such as educational opportunities, employment prospects and quality of life considerations. Besides, investigate the impacts of student migration from Kerala to the US on higher education institutions in Kerala, including changes in enrollment patterns.
- Assess the environmental impacts of migration from Kerala to the US, including its effects on local ecosystems, resource depletion and carbon emissions.
- Investigate the relationship between permanent migration from Kerala to the US and the growth of old age homes and caregiving institutions in Kerala.
- Assess the mental health and well-being of aged parents due to the migration from Kerala to the US. It includes their experiences of loneliness, depression and social isolation.
- Investigate the relationship between migration to the US and the rising number of vacant houses in Kerala.

8.5 Conclusion.

The present study aims to examine the socio-economic aspects of emigration from Kerala to the USA. Emigration from Kerala to the United States of America holds various dimensions. The socio-economic characteristics of migrants indicate diverse populations in terms of age distribution, gender representation and education levels. Certain occupational sectors are dominated by males, revealing gender imbalances in the migration from Kerala to the US. The presence of postgraduate degree holders among migrants emphasises the importance of education and skill development, in line with the skilled migration trend seen worldwide. Furthermore, the varying degrees of US affiliations among migrants highlight the intricate web of transnational identities and ties. On the other hand, the socio-economic

characteristics of non-migrants show a distinct pattern compared to migrants. They predominantly belong to the younger to middle age groups, with a notable gender imbalance favoring males. The occupational variations among non-migrants demonstrate the cointegration of education, occupation and other socio-economic factors, explaining preferences and disparities across different variables. By interpreting these distinctions, this study enriches understanding of migration patterns and their implications for both the sending and receiving societies.

Furthermore, this study examines the influence of some key factors such as GDP growth, human capital formation, population density in India and their influence on emigration from India to the US. One central theme explored in this study is the concept of 'brain drain' where skilled individuals migrate to more developed nations. ARDL results show that there is a negative correlation between the GDP growth of India and emigration from India to the USA, emphasising the urgent need for strategic interventions to address the root causes of migration. Results further show a positive relationship between human development in India and emigration to the US. It indicates that insufficient job opportunities and limited resources in the home country contribute to the outflow of skilled labour. This highlights the necessity for substantial investments in education, vocational training and skill development programs to mitigate brain drain. Conversely, emigration also leads to a phenomenon known as 'brain gain' where skilled professionals returning to India bring remittances, expertise, knowledge and technology. This actively contributes to the economic growth and development of the nation through improved entrepreneurship and technological advancement, creating a virtuous cycle of growth and prosperity.

Moreover, this study examines the role of different endowments, including human capital, social capital and family capital, in shaping migration from Kerala to the US. Amartya Sen used the term endowments and capabilities to show how an individual's resources (endowments) and their ability to convert these resources into opportunities or effective functioning (capabilities) intersect (Sen, 1982, 1985, 1987, 1999). The combined possession and interplay of these endowments enhance the

choices of individuals and opportunities in the international labour market. The results of logistic regression show that individual endowment such as education and social endowment such as social networks in the US play pivotal roles in facilitating migration. The result also shows some gender disparities in migration, with men having greater prospects for migration compared to women.

This study also analyses the impact of migration from Kerala to the US on migrant households. The results indicate differences in the standard of living, possession of assets and wealth between migrant and non-migrant households, with migrant households experiencing a statistically significant improvement in their quality of life in the post-migration period. This suggests the transformative effect of migration on the lives of individuals, leading to wealth accumulation, improved social status and enhanced opportunities for personal and professional growth. In addition to the positive economic and social impacts, emigration from Kerala to the United States also brings significant undesirable social effects, particularly for the families left behind.

The phenomenon of transnational migration results in the separation of family members, including spouses, parents, and children. One of the most significant adverse social effects of emigration is the strain it places on parents and spouses left behind. Many migrants who seek better opportunities in the United States leave behind elderly parents who rely on them for care and support. The absence of adult children can lead to feelings of loneliness, isolation and dependence on others, which may further result in psychological distress and a reduced quality of life. Similarly, spouses left behind in the homeland often encounter distinct challenges, such as managing household responsibilities, childcare and sexual issues. The absence of their partner can upset familial relationships and increase the problem of caregiving, particularly for those women who may bear the burden of domestic duties in traditional family structures. Furthermore, the emotional impact of separation can be profound, as families are faced with feelings of loss and disconnection. The inability to attend important milestones like birthdays,

anniversaries and festivals in person can deepen feelings of separation and isolation, both for migrants and their loved ones.

According to existing studies on migration to the Gulf region, most migration endeavors aim to eliminate poverty and strengthen the economic prospects of families. This benefits both the sending state and the households. However, emigration to the USA or other countries outside the Gulf is not driven by the intention to reduce poverty or improve family economic prospects, instead, it is largely aimed at enlarging their choices and achieving an ideal standard of living, which is considered a luxury for people in developing countries. In Kerala, opportunities are constrained and the market system is distorted to a certain extent, where only the service sector is largely booming. Those migrating to the US are often second or third-generation migrants, well-equipped with education and social status, seeking jobs and remuneration that match their educational qualifications. Developed countries like the US have a much more liberal market system and offer overwhelming socio-economic infrastructure, quality living conditions and better remuneration. These factors attract the upper layers of the society from Kerala.

The profile of people migrating to the US includes individuals endowed with personal, social and familial endowments. One way, migration is considered a luxury for them, but they can afford it only with the support of the above-mentioned endowments. These migrants and their next generations often seek to establish roots in the US and prefer to attain citizenship there. Their ties with Kerala usually last only until the ancestral generation is alive. Consequently, the impacts or spillover effects on Kerala are limited and may diminish over time. Therefore, the intentions, inclinations and theoretical rationales behind the US migrations are unique. Migration to the US is primarily an act by the upper layers of society, where individuals have sufficient endowments and capabilities to enlarge their choices.

REFERENCES

-
- Akerman, S. (1976). Theories and methods of migration research. En from Sweden to America: A history of migration (pp. 19-75).
- Appleyard, R. (1991). International Migration and Development: An unresolved relationship. *International Migration*, 30, 251–266.
- Arango, J. (2004). Theories of international migration. In *International Migration in the New Millennium* (1st ed., pp. 21). Routledge. doi: 10.4324/9781315252001.
- Adams Jr, R. H., & Page, J. (2005). Do international migration and remittances reduce poverty in developing countries? *World Development*, 33(10), 1645-1669.
- Aydemir, A., & Borjas, G. J. (2007). Cross-country variation in the impact of international migration: Canada, Mexico, and the United States. *Journal of the European Economic Association*, 5(4), 663-708.
- Amuedo-Dorantes, C., & Mundra, K. (2007). Social networks and their impact on the earnings of Mexican migrants. *Demography*, 44(4), 849-863.
- Adams, R. H., Cuecuecha, A., & Page, J. (2009). Remittances, consumption and investment in Ghana. *World Bank Policy Research Working Paper*, 4515.
- Azeez, A., & Begum, M. (2009). Gulf migration, remittances and economic impact. *Journal of Social Sciences*, 20(1), 55-60.
- Anderson, O. C. (2010). Illegal immigration: Causes, methods, and effects. (*No Title*).
- Antman, F. M. (2012). The impact of migration on family left behind. In *International handbook on the economics of migration* (pp. 293-308). Edward Elgar Publishing.
- Arifeen, A. (2013). Mainstreaming Migration into National Development Strategies: Understanding the contribution of remittances at the macroeconomic and household levels and exploring how these transfers could be better leveraged. In *Mainstreaming Migration into National Development Strategies* (Vol. IOM, Bangladesh Special Publication). Dhaka, Bangladesh: United Nations Development Programme.
- Appleyard, R. T. (2014). International Migration in a Changing World. *National Center for Biotechnology Information*.
- Abramitzky, R., & Boustan, L. (2017). Immigration in American economic history. *Journal of economic literature*, 55(4), 1311-1345.
- Anderson, S. (2020). A review of Trump immigration policy. *Forbes*. Retrieved from <https://www.forbes.com/sites/stuartanderson/2020/08/26/fact-check-and-review-of-trump-immigration-policy/?sh=f217fb056c07>.
- Abraham, A. (2020). International Migration, Return Migration and Occupational Mobility: Evidence from Kerala, India. *The Indian Journal of Labour Economics*, 63, 1223 - 1243. <https://doi.org/10.1007/s41027-020-00284-9>.
- Amadeo, K. (2022). Historical US Unemployment Rate by Year. Compare unemployment to inflation and GDP since 1929. *The Balance*. Retrieved from <https://www.thebalancemoney.com/unemployment-rate-by-year-3305506>.
-

-
- Abdul, R. M., Villanthenkodath, M. A., & Shibinu, S. (2023). Macroeconomic determinants of emigration from India to the United States. *International Journal of Economic Policy Studies*, 17(1), 63-74.
- Bhawra, V. K. (n.d.). *Irregular migration from India to the EU: Evidence from the Punjab*. <https://www.mea.gov.in/images/pdf/IrregularmigrationfromIndiatotheEU.pdf>.
- Bhagwati, J. (1976). The brain drain. *International Social Science Journal*, 28(4), 691-729.
- Ballard, R. (1983). The context and consequences of migration: Jullundur and Mirpur compared. *Journal of ethnic and migration studies*, 11(1-2), 117-136.
- Borjas, G. J. (1987). *Self-selection and the earnings of immigrants* (No. w2248). National Bureau of Economic Research.
- Bindu, R. (1992). Educational Characteristics of Emigrants: A Study on Investment in Human Resource Development," M.Phil. diss Centre for Development Studies, Jawaharlal Nehru University.
- Briggs, V. M. (1993). Immigrant labour and the issue of "dirty work" in advanced industrial societies. *Population and Environment*, 503-514.
- Bauer, T., & Zimmermann, K. F. (1995). *Modelling international migration: economic and econometric issues*. Volkswirtschaftliche Fak., Univ.
- Bahadur, B. (2012). Punjabi Diaspora in the Persian Gulf: A Sociological Study of Dalit Emigration. *Guru Nanak journal of sociology*, 33, 51-71.
- Bodvarsson, Ö. B., Van den Berg, H. (2013). The determinants of international migration: Theory. *The Economics of Immigration: theory and policy*, 27-57.
- Bhawra, V. K. (2013). *Irregular Migration from India to the EU: Evidence from the Punjab*.
- Bean, F. D., & Brown, S. K. (2014). Demographic analyses of immigration. In *Migration Theory* (pp. 67-89). Routledge.
- Batalova, J., & Zong, J. (2017). Indian immigrants in the United States. *Migration policy*, August, 31.
- Bhattacharjee, A. (2018). Migration of Indian health professionals to the European Union: An analysis of policies and patterns. In *India Migration Report 2018* (pp. 108-127). Routledge India.
- Brandt, J., Fischer, F., Kanaki, E., Enders, K., Labrenz, M., & Fischer, D. (2021). Assessment of subsampling strategies in microspectroscopy of environmental microplastic samples. *Frontiers in Environmental Science*, 8, 579676.
- Batalova, J., Hanna, M., & Terrazas, A. (2021). Frequently requested statistics on immigrants and immigration in the United States. *Migration Policy Institute*. <https://www.migrationpolicy.org/article/frequently-requested-statistics-immigrants-and-immigration-united-states-1>.
- Cochran, W. G. (1977). *Sampling techniques*. John Wiley & sons.
-

-
- Chaudhury, R. H. (1978). *Determinants and consequences of rural out-migration evidence: From some villages in Bangladesh*. Bangladesh Geographical Society.
- Clark, J. I. (1986). Mobility, location, and society. In A. J. Boyce (Ed.), *Symposia of the Society for the Study of Human Biology; Vol. 23: Migration and Mobility Biosocial Aspects of Human Movement* (pp. 13-31). London & Philadelphia: Taylor and Francis.
- Cherunilam, F. (1987). *International economics*. New York, NY: Tata McGraw-Hill Publishing Company.
- Castles, S., & Miller, M. J. (1998). The age of migration: International population movements in the modern world.
- Cervantes, M., & Guellec, D. (2002). The brain drain: Old myths, new realities. *Organisation for Economic Cooperation and Development. The OECD Observer*, (230), 40.
- Cassarino, J. P. (2004). Theorising return migration: The conceptual approach to return migrants revisited. *International Journal on Multicultural Societies (IJMS)*, 6(2), 253-279.
- Coleman, D. (2008). The demographic effects of international migration in Europe. *Oxford Review of Economic Policy*, 24(3), 452-476.
- Census of India. (2011). *Official website of Census of India*. Retrieved from <https://www.census2011.co.in/>.
- Chanda, R., & Ghosh, S. (2012). The Punjabi diaspora in the UK: An overview of characteristics and contributions to India. *IIM Bangalore Research Paper*, (380).
- Collier, P. (2013). *Exodus: How migration is changing our world*. Oxford University Press.
- Costantino, F. (2014). Which factors drive illegal immigration? An empirical analysis of the U.S. and the E.U. *European Journal on Criminal Policy and Research*, 20(2), 163-195.
- Clemens, M. A. (2020). Migration from Developing Countries: Selection, Income Elasticity and Simpson's Paradox. *Centro Studi Luca d'Agliano Development Studies Working Paper*, (465).
- Chishti, M., & Bolter, J. (2020). The “Trump Effect” on Legal Immigration Levels: More Perception than Reality? *Migration Policy Institute*. Retrieved from <https://www.migrationpolicy.org/article/trump-effect-immigration-reality>.
- Center for Immigration Studies. (n.d.). Historical Overview of Immigration Policy. Retrieved from <https://cis.org/Historical-Overview-Immigration-Policy>.
- Duesenberry, J. S. (1949). Income, saving and the theory of consumer behavior. (*No Title*).
- Dorigo, G., & Tobler, W. (1983). Push-pull migration laws. *Annals of the Association of American Geographers*, 73(1), 1-17.
- Directorate of Economics and Statistics. (1987). *Report of the Survey on the Utilization of Gulf Remittances in Kerala*. Government of Kerala, Trivandrum.

-
- Devi, S. U. (2002). Globalisation, information technology and Asian Indian women in the US. *Economic and Political Weekly*, 4421-4428.
- Dicicco-Bloom, B. (2004). The Racial and Gendered Experiences of Immigrant Nurses from Kerala, India. *Journal of Transcultural Nursing*, 15, 26 - 33. <https://doi.org/10.1177/1043659603260029>.
- Desai, S., & Banerji, M. (2008). Negotiated identities: male migration and left-behind wives in India. *Journal of Population Research*, 25, 337-355.
- Dyrness, W. A., & Karkkainen, V.-M. (Eds.). (2008). *Global dictionary of theology*. Intervarsity Press.
- Desai, M. A., Kapur, D., McHale, J., & Rogers, K. (2009). The fiscal impact of high-skilled emigration: Flows of Indians to the US. *Journal of Development Economics*, 88(1), 32-44.
- Desilver, D. (2014). 5 facts about Indian Americans. Pew Research Center. Retrieved from <https://www.pewresearch.org/short-reads/2014/09/30/5-facts-about-indian-americans/>.
- Doriani, K. (2014). Indian Diaspora in the United States: Exploring Attitudes towards Migratory Return. Comparative and International Educational Society Conference. DOI: 10.13140/2.1.2052.0008. University of Chile.
- Dao, T. H., Docquier, F., Parsons, C., & Peri, G. (2018). Migration and development: Dissecting the anatomy of the mobility transition. *Journal of Development Economics*, 132, 88-101.
- Decrinis, L. (2018). Human development and international migration: Lessons from low- and middle-income countries. Available at SSRN 3300129.
- Dibeh, G., Fakh, A., & Marrouch, W. (2018). Decision to emigrate amongst the youth in Lebanon. *International Migration*, 56(1), 5-22.
- De Haas, H., Castles, S., & Miller, M. J. (2019). *The age of migration: International population movements in the modern world*. Bloomsbury Publishing.
- Dedeoglu, M., Kocak, E., & Uucak, Z. (2021). The impact of immigration on human capital and carbon dioxide emissions in the USA: an empirical investigation. *Air Quality, Atmosphere & Health*, 14, 705-714. <https://doi.org/10.1007/s11869-020-00973-w>.
- Datta, A., & Basu, A. (2023). Do the Kerala nurses in Germany break the myth of migration as a male-space? *Migration and Diversity*. <https://doi.org/10.33182/md.v2i3.3066>.
- Das, Y. S. (2023). Migrating Malayalis gives Kerala lakhs of locked houses, millions in banks. *India Today*. Retrieved from <https://www.indiatoday.in/sunday-special/story/kerala-immigration-migration-news-expats-remittances-norka-roots-2479399-2023-12-24>.
- Eisenstadt, S. N. (1954). The Absorption of Immigrants. *London: Routledge & Kegan Paul*.
- Ellerman, D. (2005). Labour migration: a developmental path or a low-level trap? *Development in Practice*, 15(5), 617-630.
-

-
- Education for All in India. (2023). *Indian Migration: A Comprehensive Overview*. Retrieved from <https://educationforallinindia.com/indian-migration-a-comprehensive-overview-2023/>.
- Farr, W. (1876). Birth places of the people and the laws of migration. *Geographical Magazine*, 3, 35-71.
- Findlay, A., & Gould, W. T. (1989). Skilled international migration: a research agenda. *Area*, 3-11.
- Faist, T. (2000). Transnationalization in international migration: implications for the study of citizenship and culture. *Ethnic and racial studies*, 23(2), 189-222.
- Faini, R. (2007). Remittances and the Brain Drain; Do more skilled migrants remit more?. *The World Bank Economic Review*, 2/(2), 177-191.
- Farooq, M., & Javed, Z. H. (2009). The impact of international migration on migrants' families left behind in the rural areas of Pakistan. *Pak. J. Agri. Sci*, 46(4), 233-236.
- Farooq, M. (2011). The Impact of International Migration on Migrants' Families left behind in the Rural areas of Pakistan. *New Horizons*, 5(1), 90.
- Falck, O., Lameli, A., & Ruhose, J. (2018). Cultural biases in migration: Estimating non-monetary migration costs. *Papers in Regional Science*, 97(2), 411-439.
- Greenwood, M. J. (1971). A regression analysis of migration to urban areas of a less developed country: the case of India. *Journal of Regional Science*, 11(2), 253-262.
- Gallaway, L. E., & Vedder, R. K. (1971). Emigration from the United Kingdom to the United States: 1860–1913. *The Journal of Economic History*, 31(4), 885-897.
- Grubel, H., & Scott, A. (1977). *The brain drain: determinants, measurements and welfare effects*. Wilfrid Laurier Univ. Press.
- Gmelch, G. (1980). Return Migration. *Annual Review of Anthropology*, 9, 135-159. <https://doi.org/10.1146/annurev.an.09.100180.001031>.
- Gordon, I., & Molho, I. (1985). Women in the labour markets of the London region: a model of dependence and constraint. *Urban Studies*, 22(5), 367-386.
- Gulati, L. (1993). *In the Absence of Their Men: The Impact of Male Migration on Women*. (p. 174pp). Trivandrum: Centre for Development Studies. (ISBN: 978083991286).
- Golini, A. (1993). Population Movements. In K. Madhavan & P.M. Krishna (Eds.), *Methodology of Population Studies and Development* (pp. 155-173). *New Delhi: Sage publication*.
- Ghosal, A. (2000). Sen's endowment- entitlement mapping in development economics: Cybernetic interpretation. *Kybernetes*, 29(5/6), 680-688.
- Greenwood, M. J., & Hunt, G. L. (2003). The early history of migration research. *International Regional Science Review*, 26(1), 3-37.
- Gupta, P. (2005). Macroeconomic determinants of remittances: Evidence from India (No. 2005-2224). International Monetary Fund.
-

- Gupta, P. (2006). Macroeconomic determinants of remittances: evidence from India. *Economic and Political Weekly*, 2769-2775.
- Grogger, J., & Hanson, G. H. (2011). Income maximization and the selection and sorting of international migrants. *Journal of Development Economics*, 95(1), 42-57.
- Government of India. (2011). *Census of India 2011: Primary Census Abstract Data*. Ministry of Home Affairs, Office of the Registrar General & Census Commissioner.
- Government of Kerala. Department of Economics and Statistics. (2011). *Panchayat Level Statistics 2011 Kottayam District*. Retrieved from <https://www.ecostat.kerala.gov.in/publication-detail/panchayat-level-statistics-2011-kottayam-district>.
- Government of Kerala. Department of Economics and Statistics. (2011). *Panchayat Level Statistics 2011 Pathanamthitta District*. Retrieved from <https://www.ecostat.kerala.gov.in/publication-detail/panchayat-level-statistics-2011-Pathanamthitta-district>.
- Giordano, A., & Terranova, G. (2012). The Indian policy of skilled migration: Brain return versus diaspora benefits. *Journal of Global Policy and Governance*, 1, 17-28.
- Geis, W., Uebelmesser, S., & Werding, M. (2013). How do migrants choose their destination country? An analysis of institutional determinants. *Review of International Economics*, 21(5), 825-840.
- Goldstein, S. M. (2014). *Jewish diaspora in the ancient world*. Oxford University Press.
- Gujarati, D. N. (2014). *Econometrics* (5th edn.). McGraw-Hill Education.
- Grieco, E. M. (2014). The “second great wave” of immigration: growth of the foreign-born population since 1970. United States Census Bureau.
- Gann, S., Jordan, M., Patrick, S., & Breek, W. (2017). A case study of high-skilled migration from India. *Brain Circulation*.
- Gul, A., Naz, A., & Nadeemullah, M. (2018). Migration and women left behind: Challenges and constraints. *Clinical Social Work and Health Intervention*, 9(4), 30-35.
- Guha, P. (2018). Challenges and opportunities for the Indian migrants in the EU: In the context of EU enlargement and Brexit. *India Migration Report 2018*, 87-107.
- Gerry, K. (2021). “We Become Capable of Handling Everything”: Gender and Gulf Migration in Kerala, South India. *Journal for Undergraduate Ethnography*. <https://doi.org/10.15273/jue.v11i3.11242>.
- Ghafoor, N., & Akbar, M. R. (2022). Socioeconomic determinants of migration in the city of Lahore, Pakistan. *Journal of the Knowledge Economy*, 13(4), 3029-3049.
- Gopika, P., Hijam, Y., Riya, R., Mittal, N., & Singh, S. (2022). Impact of migration on economic and social development in India. *International journal of health sciences*. <https://doi.org/10.53730/ijhs.v6ns2.7219>.
- Global Data Lab. (2023). *Subnational HDI (v7.0)*. Retrieved from <https://globaldatalab.org/shdi/about/>.

-
- Harris, J. R., & Todaro, M. P. (1970). Migration, unemployment and development: a two-sector analysis. *The American economic review*, 60(1), 126-142.
- Hugo, G. (1994). *Migration and the Family*. UN.
- Hanson, G. H., & Spilimbergo, A. (1999). Illegal immigration, border enforcement, and relative wages: Evidence from apprehensions at the US-Mexico border. *American economic review*, 89(5), 1337-1357.
- Hari, K. S., & Kannan, K. P. (2002). Kerala's gulf connection: emigration, remittances and their macroeconomic impact 1972-2000.
- Hunger, U. (2002). The "Brain Gain" Hypothesis: Third World Elites in Industrialized Countries and Socioeconomic Development in their Home Country.
- Higham, J. (2002). *Strangers in the land: Patterns of American nativism, 1860-1925*. Rutgers University Press.
- Harris, N. (2005). Migration and development. *Economic and Political Weekly*, 4591-4595.
- Hercog, M. (2008). The role of the state in attracting highly-skilled migrants: The case of the Netherlands. *EIPAScope*, 2008(3), 1-6.
- Hatton, T. J., & Williamson, J. (2009). Are third world emigration forces abating?. *CID Working Paper Series*.
- Hatton, T., & Williamson, J. (2011). Are third world emigration forces abating? *World Development*, 39, 20-32. <https://doi.org/10.1016/J.WORLDDEV.2010.05.006>.
- Huth, L. (2018). Immigration in America by the Numbers. *US News & World Report*. Retrieved from <https://www.usnews.com/news/data-mine/articles/2018-05-01/immigration-in-america-by-the-numbers>.
- Hanna, M., & Batalova, J. (2020). Indian immigrants in the United States. *Migration Policy Institute*. Retrieved from <https://www.migrationpolicy.org/article/indian-immigrants-united-states-2019>.
- Hackman, M. (2020). How Trump has worked to restrict immigration. *The Wall Street Journal*. Retrieved from <https://www.wsj.com/articles/how-trump-has-worked-to-restrict-immigration-11592491276>.
- Haschek, W. M., Rousseaux, C. G., Wallig, M. A., & Bolon, B. (Eds.). (2021). *Haschek and Rousseaux's Handbook of Toxicologic Pathology, Volume 1: Principles and Practice of Toxicologic Pathology*. Academic press.
- Hoffman, A., & Batalova, J. (2022). Indian Immigrants in the United States. *Migration Policy Institute*. Retrieved from <https://www.migrationpolicy.org/article/indian-immigrants-united-states#:~:text=The%20Diversity%20Visa%20lottery%20was,not%20eligible%20for%20the%20lottery>.
- Isaac, J. (1947). *Economics of Migration*, Kegan Paul, French, Trubner Sc Co. *Lon don*.

-
- International Labour Organisation. Sectoral Activities Programme. (1995). *Social and Labour Issues Concerning Migrant Workers in the Construction Industry*. Geneva: International Labour Office.
- Issac, T. T. (1997). Economic Consequences of gulf migration. *Kerala's Demographic Transition: Determinants and Consequences*, Sage Publications New Delhi.
- Issah, I., Khan, T. Y., & Sasaki, K. (2005). Do migrants react to infrastructure differences between urban and rural areas? Development of an extended Harris–Todaro model. In *Review of Urban & Regional Development Studies: Journal of the Applied Regional Science Conference* (Vol. 17, No. 1, pp. 68-88). Oxford, UK and Boston, USA: Blackwell Publishing, Inc.
- International Organization for Migration (IOM). (2014). *Migration Initiatives 2015 Regional Strategies*. Geneva: International Organization for Migration.
- International Organization for Migration (IOM). (2015). *World Migration Report 2015: Overview*.
<https://www.iom.int/sites/g/files/tmzbd1486/files/country/docs/syria/IOM-World-Migration-Report-2015-Overview.pdf>.
- Institute of International Education. (2017). *Open Doors Report on International Educational Exchange- 2016-17*. Retrieved from <https://www.iie.org/news/2017-11-13-open-doors-data/>.
- International Organization for Migration. (2019). *Glossary on migration* (International migration law series No. 25). Retrieved from <https://www.iom.int/key-migration-terms>.
- Israel, E., & Batalova, J. (2020). Mexican immigrants in the United States. *Migration Policy Institute*. Retrieved from <https://www.migrationpolicy.org/article/mexican-immigrants-united-states-2019>.
- Israel, E., & Batalova, J. (2021). International students in the United States. *Migration Policy Institute*. Retrieved from <https://www.migrationpolicy.org/article/international-students-united-states>.
- International Organization for Migration (IOM). (2022). *World Migration Report-2022*. Geneva: IOM.
- Jensen, J. M. (1988). Passage from India: Asian Indian Immigrants in North America. (*No Title*).
- Jain, P. C. (1989). Emigration and settlement of Indians abroad. *Sociological Bulletin*, 38(1), 155-168.
- Joseph, K. V. (2001). Factors and Pattern of Migration: The Kerala Experience. *Journal of Indian School of Political Economy*, 55-72.
- Joaquin, A. (2004). Theories of international migration. In J. Daniele (Ed.), *International Migration in the New Millennium: Global Movement and Settlement*. Ashgate. Retrieved from <https://www.ashgate.com>.
-

-
- Jayaram, N. (2004). *The Indian diaspora: dynamics of migration*. New Delhi: Sage Publications India Private Limited.
- Jain, P. C. (2005). Indian migration to the Gulf countries: Past and present. *India Quarterly*, 61(2), 50-81.
- Jongwanich, J. (2007). Workers' remittances, economic growth and poverty in developing Asia and the Pacific countries (No. WP/07/01). *United Nations Economic and Social Commission for Asia and the Pacific* (ESCAP).
- Just Kerala. (n.d.). Pathanamthitta. Retrieved from <https://www.justkerala.in/districts-in-kerala/Pathanamthitta>.
- Julien, J., & Hoffman, I. E. (2019). *Basic Biostatistics for Medical and Biomedical Practitioners*.
- Kraly, E. P., & Gnanasekaran, K. S. (1987). Efforts to improve international migration statistics: A historical perspective. *International Migration Review*, 21(4), 967-995.
- Kannan, K. P., & Hari, K. S. (2002). *Kerala's gulf connection: emigration, remittances and their macroeconomic impact 1972-2000* (No. 328). Working Paper 328. Thiruvananthapuram: Centre for Development Studies.
- Khadria, B. (2006). India: Skilled migration to developed countries, labour migration to the Gulf. *Migración y desarrollo*, (7), 4-37.
- Koettl, J. (2006). *The relative merits of skilled and unskilled migration, temporary and permanent labour migration, and portability of social security benefits* (No. 38007, pp. 1-37). The World Bank.
- Khadria, B. (2009). Migration of highly skilled Indians: Current policy trends and future insights on India-US migration. *Speech at Georgetown University Institute for the Study of International Migration*, 8.
- Kapur, D. (2010). *Diaspora, Development, and Democracy: The Domestic Impact of International Migration from India*. . <https://doi.org/10.1515/9781400835089>.
- Koudela, P. (2013). A brief history of immigration policy in the United States.
- Kumar, P., Bhattacharya, U., & Nayek, J. K. (2014). Return migration and development: Evidence from India's skilled professionals. In *Indian skilled migration and development: To Europe and back* (pp. 263-284). New Delhi: Springer India.
- Kurien, P. (2014). The Impact of International Migration on Home Churches: The Mar Thoma Syrian Christian Church in India. *Journal for the Scientific Study of Religion*, 53, 109-129. <https://doi.org/10.1111/JSSR.12082>.
- Khan, M., & C., V. (2016). International Migration, Remittances and Labour Force Participation of Left-behind Family Members: A Study of Kerala. *Margin: The Journal of Applied Economic Research*, 10, 118 - 86. <https://doi.org/10.1177/0973801015612669>.

-
- Khan, M. I., & Valatheeswaran, C. (2016). International migration, remittances and labour force participation of left-behind family members: A study of Kerala. *Margin: The Journal of Applied Economic Research*, 10(1), 86-118.
- Kapiszewski, A. (2017). Arab versus Asian migrant workers in the GCC countries. In *South Asian migration to gulf countries* (pp. 66-90). Routledge India.
- Khadria, B. (2018). “Blue Card”: A comment on the EU’s preferential immigration visa for attracting human capital vis-a-vis its own multilateral conundrum. In *India Migration Report 2018* (pp. 56-61). Routledge India.
- Kiprop, J. (2019). Cities with the Largest Indian-American Population. *World Atlas*.
- Khan, A. (2019). Forced Migration of Muslims from Kerala to Gulf Countries. , 207-222. https://doi.org/10.1007/978-981-13-9224-5_9.
- Kably, L. (2019). Indians in the US scramble to get citizenship ahead of president polls. *The Times of India*. Retrieved from <https://timesofindia.indiatimes.com/india/indians-in-us-scramble-to-get-citizenship-ahead-of-president-polls/articleshow/69436606.cms>.
- Kannan, K. P., & Hari, K. S. (2020). Revisiting Kerala’s gulf connection: half a century of emigration, remittances and their macroeconomic impact, 1972–2020. *The Indian Journal of Labour Economics*, 63, 941-967.
- Kaur, A., Sood, M., & Singh, C. P. (2021). Emigration to USA, UK and European countries from India: Untold stories of illegal migrants from Doaba region of Punjab, India. *Elementary Education Online*, 20(4), 2858-2868. <https://doi.org/10.17051/ilkonline.2021.04.324>.
- Kerala State Planning Board. (n.d.). *Official website of Kerala State Planning Board*. Retrieved from <https://spb.kerala.gov.in/>.
- Kerala State Planning Board. (2022). *Pathanamthitta district profile*. Retrieved from <https://spb.kerala.gov.in/en/pathanamthitta>.
- Kerala State Planning Board. (2022). *Kottayam district profile*. Retrieved from <https://spb.kerala.gov.in/en/kottayam>.
- Kaur, K., & Sinha, A. (2023). Empty nests: A study on the left-behind parents of emigrated children from Punjab (India). *The Family Journal*. <https://doi.org/10.1177/10664807231157028>.
- Lewis, W. A. (1954). Economic development with unlimited supply of labour. *The Manchester School*, 22(2), 139-191. <https://doi.org/10.1111/j.1467-9957.1954.tb00021.x>.
- Lee, E. S. (1966). A theory of migration. *Demography*, 3(1), 47-57. <https://doi.org/10.2307/2060063>.
- Lee, E. S. (1968). A theory of migration. In D. M. Heer (Ed.), *Readings on population* (pp. 210-222). Prentice-Hall.
- Levy, M. B., & Wadycki, W. J. (1972). Lifetime versus one-year migration in Venezuela. *Journal of Regional Science*, 12(3), 407-415.
-

-
- Lucas, R. (1981). International migration: economic causes, consequences and evaluation. In M. Kritiz, C. Keely, & S. Tomasai (Eds.), *Global Trends in Migration* (pp. 26-38). New York: Center for Migration Studies.
- Lucas, R. E. (1988). On the Mechanics of Economic Development. *Journal of Monetary Economics*, 22(1), 3-42.
- Larson, D., & Mundlak, Y. (1997). On the intersectoral migration of agricultural labour. *Economic Development and Cultural Change*, 45(2), 295-319.
- LeMay, M. C., & Barkan, E. R. (Eds.). (1999). *US immigration and naturalization laws and issues: A documentary history*. Bloomsbury Publishing USA.
- Lazareva, O., & Sonin, K. (2008). Russian migrants to Russia: Choice of location and labour market outcomes. *Center for Economic and Financial Research at New Economic School. Working Paper*, (117).
- Li, W., & Lo, L. (2009). Highly-skilled Indian migrations in Canada and the US: The tale of two immigration systems. *International Migration and Diaspora Studies Working Paper Series*, (4).
- Lal, B. V. (2012). Migration, diaspora, and transnationalism: Reflections on the Indian experience. *Journal of Ethnic and Migration Studies*, 38(2), 223-238.
- Lakshman, N. (2020). How will the US visa ban impact India? *The Hindu*. Retrieved from <https://www.thehindu.com/news/national/the-hindu-explains-how-will-the-us-visa-ban-impact-india/article61663514.ece>.
- Mangalam, J. J. (1968). *Human migration: A guide to migration literature in English, 1955-1968*. Bombay: Asia Publishing House.
- McFadden, D. (1974). Conditional logit analysis of qualitative choice behavior. In P. Zarembka (Ed.), *Frontiers in Econometrics* (pp. 105-142). Academic Press. Retrieved from URL: elsa.berkeley.edu/reprints/mcfadden/zarembka.pdf.
- Mathew, E. T., & Nair, P. G. (1978). Socio-economic characteristics of emigrants and emigrants' households: A case study of two villages in Kerala. *Economic and Political Weekly*, 1141-1153.
- Mundlak, Y. (1978). Occupational migration out of agriculture: A cross-country analysis. *The Review of Economics and Statistics*, 392-398.
- Michael, P. (1979). Birds of Passage: migrant labour and industrial societies. *Journal of Economic Issues Cambridge: Cambridge University Press*, 14(3), 785-789.
- Massey, D. S. (1990). Social structure, household strategies, and the cumulative causation of migration. *Population Index*, 56, 3-26.
- Massey, D. S., Arango, J., Hugo, G., Kouaouci, A., Pellegrino, A., & Taylor, J. E. (1993). Theories of international migration: A review and appraisal. *Population and Development Review*, 19(3), 431-466.
-

-
- Massey, D. S., Joaquin, A., Graeme, H., Ali, K., Adela, P., & Edward, T. (1998). *Worlds in motion: Understanding international migration at the end of the millennium*. Oxford: Clarendon Press.
- Massey, D. S., Arango, J., Hugo, G., Kouaouci, A., & Pellegrino, A. (1999). *Worlds in motion: understanding international migration at the end of the millennium: understanding international migration at the end of the millennium*. Clarendon Press.
- Mathew, E. T., Zachariah, K. C., & Rajan, S. I. (2000). Socio-economic and demographic consequences of migration in Kerala.
- Massey, D. S., Durand, J., & Malone, N. J. (2002). *Beyond smoke and mirrors: Mexican immigration in an era of economic integration*. Russell Sage Foundation.
- Munshi, K. (2003). Networks in the modern economy: Mexican migrants in the US labour market. *The Quarterly Journal of Economics*, 118(2), 549-599.
- Musetescu, R. (2006). International labour migration: Between human rights and political objectives. *Romanian Economic and Business Review*, 1(3), 34.
- Mallick, H. (2008). Do remittances impact the economy? Some empirical evidence from a developing economy.
- McIntosh, P. (2010). *Action research and reflective practice: Creative and visual methods to facilitate reflection and learning*. Routledge.
- Migration Policy Institute (MPI). (2014). *The Indian Diaspora in the United States*. Prepared for the Rockefeller Foundation-Aspen Institute Diaspora Program (RAD). Retrieved from <https://www.migrationpolicy.org/sites/default/files/publications/Indian-Diaspora-US-Final.pdf>.
- Mehdi, A., Chaudhry, D., Joshi, P., & Tomar, P. (2018). The European Union as a preferred destination for Indian migrants? Prospects, patterns, policies and challenges. In *India Migration Report 2018* (1st ed., pp. 30). Routledge India. DOI: 9780429434556.
- Melin, P. (2018). Social security benefits of Indian migrants in Europe: Loss or win situation in case of return? In *India Migration Report 2018* (1st ed., pp. 14). Routledge India. DOI: 9780429434556.
- Migration Policy Institute. (2020). Tabulation of data from the US Census Bureau (2017).
- Mahalik, M. K., Villanthenkodath, M. A., Mallick, H., & Gupta, M. (2021). Assessing the effectiveness of total foreign aid and foreign energy aid inflows on environmental quality in India. *Energy Policy*, 149, 112015.
- Nair, P. (1983). *Asian Emigration to the Middle East: Emigration from India (a Report on the State of the Art)*. Centre for Development Studies (Trivandrum, India).
- Nair, P. R. G. (1986). Asian migration to the Arab world: Migration from Kerala (India). *Trivandrum: Centre for Development Studies*.
-

-
- Nair, P. G. (1986). Migration from Kerala: India. In Gunatilleke, G. (Ed.), *Migration of Asian Workers to the Arab World* (pp. 67-85). *The United Nations Press*.
- Nair, P. G. (1991). Asian migration to the Arab world: Kerala (India). *Migration to the Arab World: Experience of Returning Migrants*, 47, 19.
- Nayyar, D. (1994). *Migration, remittances and capital flows: The Indian experience*. New Delhi: *Oxford University Press*.
- Northrup, D. (1995). *Indentured labour in the age of imperialism, 1834-1922*. Cambridge University Press.
- Nambiar, A. C. K. (1998). A Voyage to the Gulf and Back. *Indian Migration to the Middle East: Trends, Patterns and Socio-economic Impacts*, 153.
- Nguyen, L., Yeoh, B., & Toyota, M. (2006). Migration and the well-being of the 'left behind' in Asia. *Asian Population Studies*, 2(1), 37-44. <https://doi.org/10.1080/17441730600700507>.
- Naujoks, D. (2009). Emigration, immigration, and diaspora relations in India. *Migration Information Source*.
- Nowrasteh, A. (2014). Post-World War II Migration and Lessons for Studying Liberalized Immigration. *Cato Institute*. Retrieved from <https://www.cato.org/blog/post-world-war-ii-migration-lessons-studying-liberalized-immigration>.
- Nejad, M. N., & Young, A. T. (2016). Want freedom, will travel: Emigrant self-selection according to institutional quality. *European Journal of Political Economy*, 45, 71-84.
- Noushad, A. P., Parida, J. K., & Raman, R. K. (2022). Low-skilled emigration, remittances and economic development in India. *Migration and Development*, 11(3), 389-419.
- Osella, F., & Osella, C. (2003). Migration, Money and Masculinity in Kerala. *Journal of the Royal Anthropological Institute*, 6, 117-133. <https://doi.org/10.1111/1467-9655.T01-1-00007>.
- Osili, U. O. (2007). Remittances and savings from international migration: Theory and evidence using a matched sample. *Journal of development Economics*, 83(2), 446-465.
- Office of the Registrar General and Census Commissioner, India. Ministry of Home Affairs, Government of India. (2011). *Census of India 2011*. Retrieved from <https://censusindia.gov.in/census.website/>.
- Otoi, A., Titan, E., & Dumitrescu, R. (2014). Internal and international migration: Is a dichotomous approach justified? *Procedia-Social and Behavioral Sciences*, 109, 1011-1015.
- Ozden, C., Kerr, S., Kerr, W., & Parsons, C. (2017). Global talent flows: Causes and consequences of high-skilled migration. *World Bank Blogs*.

-
- Oda, H., Tsujita, Y., & Irudaya Rajan, S. (2018). An analysis of factors influencing the international migration of Indian nurses. *Journal of International Migration and Integration*, 19, 607-624.
- Prakash, B. A. (1978). Impact of foreign remittances: A case study of Chavakkad village in Kerala. *Economic and Political weekly*, 1107-1111.
- Prothero, R. M. (1979). The Context of Circulation in West Africa. *Population Geography*, 1(5), 1-20.
- Piore, M. J. (1979). *Birds of Passage: Migrant labour and industrial societies*. New York: Cambridge University Press.
- Prakash, B. A. (1998). Gulf migration and its economic impact: The Kerala experience. *Economic and Political Weekly*, 3209-3213.
- Pesaran, M. H., Shin, Y., & Smith, R. J. (2001). Bounds testing approaches to the analysis of level relationships. *Journal of Applied Econometrics*, 16(3), 289–326.
- Palloni, A., Massey, D. S., Ceballos, M., Espinosa, K., & Spittel, M. (2001). Social capital and international migration: A test using information on family networks. *American journal of sociology*, 106(5), 1262-1298.
- Poros, M. V. (2002). The role of migrant networks in linking local labour markets: the case of Asian Indian migration to New York and London. *Global networks*, 1(3), 243-260.
- Pushpangadan, K. (2003). Remittances, consumption and economic growth in Kerala: 1980-2000.
- Purkayastha, B. (2005). Skilled migration and cumulative disadvantage: The case of highly qualified Asian Indian immigrant women in the US. *Geoforum*, 36(2), 181-196. <https://doi.org/10.1016/j.geoforum.2003.11.006>.
- Percot, M. (2005). Indian Nurses in the Gulf: Two Generations of Female Migration. *South Asia Research*, 26, 41 - 62. <https://doi.org/10.1177/0262728006063198>.
- Pat, A. K. (2005). Black Spots in Kerala's Socio-Economic Scene. *Economic and Political Weekly*, 2392-2394.
- Prakash, B. A. (2008). Indian Migration to West Asia. *The Indian Economy Since 1991: Economic Reforms and Performance*, 85.
- Paul, J. (2008). *International Business*. PHI Learning Limited.
- Peri, G. (2010). The effect of immigrants on US employment and productivity. *FRBSF Economic Letter*, 26, 1-5.
- Pew Research Center. (2012). Asian Americans: A mosaic of faiths [Overview]. *Pew Research Center*. Retrieved from <https://www.pewresearch.org/religion/2012/07/19/asian-americans-a-mosaic-of-faiths-overview/>.
- Piesse, M. (2014). Factors influencing migration and population movements - Part 1 [Blog post]. *Indian Ocean Research Programme*.
-

-
- Percot, M. (2014). A Profession in Order to Leave: Migration of Keralese Nurses (South India). *Tiers-monde*, 45-59.
- Portes, A., & Rumbaut, R. G. (2014). Immigrant America. A portrait, updated, and expanded. *Lectures, Les livres*.
- Parida, J. K., Mohanty, S. K., & Raman, K. R. (2015). Remittances, household expenditure and investment in rural India: Evidence from NSS data. *Indian Economic Review*, 79-104.
- Parida, J. K., & Raman, K. R. (2018). India: Rising trends of international and internal migration. In *Handbook of migration and globalisation* (pp. 226-246). Edward Elgar Publishing.
- Ravenstein, E. G. (1885). The laws of migration. *Journal of the Royal Statistical Society*, 48(2), 167-235.
- Roy, A. D. (1951). Some thoughts on the distribution of earnings. *Oxford economic papers*, 3(2), 135-146.
- Ranis, G., & Fei, J. C. (1961). A theory of economic development. *The American economic review*, 533-565.
- Runciman, W. G. (1966). Relative deprivation and social justice: A study of attitudes to social inequality in twentieth-century England. Berkeley: University of California Press.
- Rajan, S. I. (1989). Aging in Kerala: One more population problem? *Asia-Pacific population journal / United Nations*, 4(3), 45-64. <https://www.researchgate.net/publication/11121319>.
- Reitz, J. (2001), "Immigrant Skill Utilization in the Canadian Labour Market: Implications of Human Capital Research," *Journal of International Migration and Integration*, 2, 347-378.
- Ruiz-Arranz, M., & Giuliano, P. (2005). Remittances, financial development, and growth (No. 5-234). International Monetary Fund.
- Russell, S. S. (2006). International migration: Implications for the World Bank (HROW54, HCO working paper). The World Bank. ISBN: 0-8213-3186-8.
- Rajan, S. I., & Mishra, U. S. (2007). *Managing migration in the Philippines: lessons for India*. Centre for Development Studies.
- Ratha, D. (2007). Leveraging remittances for development. Policy Brief, 3. World Bank Publications.
- Rajan, S. I., & Kumar, P. (2010). Historical overview of international migration. In *India Migration Report 2010* (pp. 1-29). Routledge India.
- Rajan, S. I., & Narayana, D. (2014). The financial crisis in the Gulf and its impact on South Asian migration and remittances. In *India Migration Report 2012* (pp. 74-93). Routledge India.
-

-
- Rajasenan, D., Jayakumar, M. S., & Abraham, B. G. (2016). Socio economic and psychological dimensions of migration-induced exclusion of the elderly in Kerala, India: an empirical analysis. *International Journal of Migration, Health and Social Care*, 12(1), 51-65.
- Ruksana, M. M. (2016). Emigration and Remittances-A Study on Kerala Economy. [International Journal of Engineering Research and Modern Education (IJERME), /I).
- Rajan, S. I., Peter, B., Mishra, U. S., & Narendran, V. (2018). Impact of demographic transition in Kerala on migration and labour force. In *India Migration Report 2019* (pp. 316-329). Routledge India.
- Rajan, S. I. (2018). Short-term visa requirements for Indian nationals in the European Union. In *India Migration Report 2018* (pp. 62-72). Routledge India.
- Rajan, S. I., & Zachariah, K. C. (2018). *The future of international migration: Impact on jobs and the economy*. Springer.
- Reserve Bank of India. (2018). *Inward remittances survey, 2016-17*. Retrieved from https://rbi.org.in/scripts/FS_PressRelease.aspx?prid=44722.
- Rajan, S. I., & Zachariah, K. C. (2019). *Emigration and remittances: New evidence from the Kerala migration survey 2018* (No. id: 12989).
- Rajan, S. I., & Zachariah, K. C. (2020). New evidences from the Kerala Migration Survey, 2018. *Centre for Development Studies*, 55(4).
- RBI Remittance Survey. (2021). "Headwinds of COVID-19 and India's Inward Remittances". *RBI Bulletin*, July 2022. Retrieved from https://www.rbi.org.in/Scripts/BS_ViewBulletin.aspx?Id=20010
- Rajagopal, V. (2022). As brain drain of Kerala youth continues, is the state turning into an old age home? *India Today*. <https://www.indiatoday.in/news-analysis/story/as-brain-drain-kerala-youth-continues-is-the-state-turning-into-old-age-home-migration-abroad-2302621-2022-11-28>.
- Rajan, S.I, Shibu, S., & Irudayarajan, R. (2023). 'Lending a helping hand to my people back home in times of crisis': Kerala diaspora network's presence in times of crisis in the Gulf migration corridor. *South Asian Diaspora*, 15(2), 171-184.
- Stouffer, S. A. (1940). Intervening opportunities: a theory relating mobility and distance. *American sociological review*, 5(6), 845-867.
- Sjaastad, L. A. (1962). The costs and returns of human migration. *Journal of political Economy*, 70(5, Part 2), 80-93.
- Schultz, T. W. (1968). Human capital: Policy issues and research opportunities. In *Education, income, and human capital* (pp. 1-34). National Bureau of Economic Research.
- Schultz, T. P. (1978). Notes on the Estimation of the Macro Economic Determinants of Migration.
-

-
- Sen, A. (1982). *Poverty and famines: an essay on entitlement and deprivation*. Oxford University Press.
- Sen, A. (1985). *Commodities and capabilities*. North-Holland.
- Sandefur, G. D. (1986). American Indian migration and economic opportunities. *International migration review*, 20(1), 55-68.
- Sen, A. (1987). *The standard of living*. Cambridge University Press.
- Saith, A. (1989). Macro-economic issues in international labour migration: a review. *ISS Working Paper Series/General Series*, 48, 1-54.
- Stark, O., & Taylor, J. E. (1989). Relative deprivation and international migration oded stark. *Demography*, 26(1), 1-14.
- Stark, O. (1991). *The migration of labour*. Cambridge: Basil Blackwell.
- Sekher, T. V. (1997). *Migration and social change*. Jaipur: Rawat Publications.
- Skeldon, R. (1997). *Migration and Development: A Global Perspective* (1st ed.). London: Routledge. <https://doi.org/10.4324/9781315843346>.
- Sekhar, T. V. (1998). Social Effects of Gulf Migration: Impact of Male Emigration on Women and Family. *op. cit*, 135-150.
- Sen, A. (1999). *Development as freedom*. Oxford University Press.
- Straubhaar, T. (2000). International mobility of the highly skilled: Brain gain, brain drain or brain exchange.
- Saxenian, A., Motoyama, Y., & Quan, X. (2002). *Local and global networks of immigrant professionals in Silicon Valley*. Public Policy Instit. of CA.
- Srivastava, R., & Sasikumar, S. K. (2003). An overview of migration in India, its impacts and key issues. In *Regional Conference on Migration, Development and Pro-Poor Policy Choices in Asia* (Vol. 22, p. 24). Dhaka: Eldis Document Store.
- Santos, M. D. D., & Postel-Vinay, F. (2003). Migration as a source of growth: the perspective of a developing country. *Journal of Population Economics*, 16(1), 161-175.
- Singh, S. (2003). *Brain drain to brain gain?: return migration of Indian information technology professionals* (Doctoral dissertation, Massachusetts Institute of Technology).
- Silver, A. (2006). Families across borders: The effects of migration on family members remaining at home. *College of Arts and Sciences, Department of Sociology*. <https://doi.org/10.17615/sec1-1g47>.
- Schiopu, I. C., & Siegfried, N. (2006). Determinants of workers' remittances; Evidence from the European neighbouring region. European Central Bank.

-
- Sasikumar, S. K., & Hussain, Z. (2008). Managing international labour migration from India: Policies and perspectives. *ILO Asia-Pacific Working Paper Series, New Delhi*.
- Spring, J. (2008). *Globalization of education: An introduction*. Routledge.
- Sahay, A. (2009). *Indian diaspora in the United States: brain drain or gain?*. Lexington books.
- Shylaja, L. (2010). Socio-economic and Demographic Impact of Labour Emigration in Kerala. *ISDA Journal*, 20(1), 61-74.
- Sahoo, A., Sangha, D., & Kelly, M. (2010). From 'temporary migrants' to 'permanent residents': Indian H-1B visa holders in the United States. *Asian Ethnicity*, 11, 293 - 309. <https://doi.org/10.1080/14631369.2010.510872>.
- Singh, S. K., & Hari, K. S. (2011). International migration, remittances and its macroeconomic impact on Indian economy. IIMA.
- Siddique, A., Selvanathan, E. A., & Selvanathan, S. (2012). Remittances and economic growth: Empirical evidence from Bangladesh, India and Sri Lanka. *Journal of development studies*, 48(8), 1045-1062.
- Sujathan, P. K. (2012). International migration and socioeconomic issues of the left behind elderly in Kerala. *University of Calicut, Department of Economics*.
- Sharma, R. (2013). Teachers on the move: International migration of school teachers from India. *Journal of Studies in International Education*, 17(3), 262-283.
- Sanitha, V. P., & Noushad, A. P. (2018). Migration impact on left-behind elderly's labour participation in Kerala. *Indian Journal of Economics and Development*, 1-6.
- Scheffel, J., & Zhang, Y. (2019). How does internal migration affect the emotional health of elderly parents left-behind? *Journal of Population Economics*, 32(3), 953-980.
- Sebastian, R. (2019). Migration of Nurses from Kerala to the UK: A socio-economic study. *Department of Applied Economics, Cochin University of Science and Technology (CUSAT), Kochi*.
- Shibinu, S. (2020). Socio-economic dynamics of Gulf migration: A panel data analysis. In *India Migration Report 2020* (pp. 120-135). Routledge India.
- Sunny, J., Parida, J. K., & Azurudeen, M. (2020). Remittances, investment and new emigration trends in Kerala. *Review of Development and Change*, 25(1), 5-29.
- Sharma, K. (2020). Indian students pursuing higher studies in the United States in 2019-20 at three year low. *The Indian Express*. Retrieved from <https://indianexpress.com/article/education/indian-students-pursuing-higher-studies-in-united-states-in-2019-20-at-three-year-low-7043485/>.
- Sangani, P. (2020). Indian immigration to US down 7.5%. *Economic Times*. Retrieved from <https://economictimes.indiatimes.com/nri/visa-and-immigration/indian-immigration-to-us-down-7-5/articleshow/73262243.cms>.
-

-
- Singh, R. (2022). Origin of World's Largest Migrant Population, India Seeks to Leverage Immigration. *Migration Policy Institute*. Retrieved from <https://www.migrationpolicy.org/article/india-migration-country-profile>.
- Todaro, M. P. (1969). A model of labour migration and urban unemployment in less developed countries. *The American Economic Review*, 59(1), 138-148.
- Tinker, H. (1974). A new system of slavery: the export of Indian labour overseas 1830-1920. (*No Title*).
- Todaro, M. P. (1976). Migration in Developing Countries. *Geneva: ILO*.
- Terrazas, A., & Batog, C. (2010). Indian immigrants in the United States. *Migration Policy Institute*. Retrieved from <https://www.migrationpolicy.org/article/indian-immigrants-united-states-2008>.
- Tumbe, C. (2011). Remittances in India: Facts and Issues. *The Indian Journal of Labour Economics*, 54(3), 479-501.
- Tiwari, A. K., Ghei, D., & Goel, P. (2018). Social Security Agreements (SSAs) in practice: Evidence from India's SSA with countries in Europe. In *India Migration Report 2018* (pp. 31-55). Routledge India.
- The World Bank. (2018). *Migration and development brief 31: Thematic working group data and demographics remittances and diaspora resources, KNOMAD*. Washington DC: World Bank Group.
- Thandi, S. S. (2020). Evaluating the potential contribution of the Punjabi diaspora to rural development. In *Rural Development in Punjab* (pp. 446-459). Routledge India.
- Times of India. (2020). Why Indians are rushing for US citizenship? Key things to know. Retrieved from <https://timesofindia.indiatimes.com/business/india-business/why-indians-are-rushing-for-us-citizenship-key-things-to-know/articleshow/73475088.cms>.
- The Economic Times. (2021). At 18 million, India has the world's largest diaspora population. *The Economic Times*. Retrieved from <https://economictimes.indiatimes.com/nri/migrate/at-18-million-india-has-the-worlds-largest-diaspora-population/articleshow/80290768.cms>.
- United Nations. (1958). *Multilingual demographic dictionary*. Department of Economic and Social Affairs.
- Usha L.R, 1984. Emigration of Keralites to the Gulf Countries: An Enquiry into the Socio-Economic Impacts and Rehabilitation of Returnees, M. Phil dissertation, University of Kerala (Unpublished).
- United States Congress. (1990). Immigration and Nationality Act of 1990. Pub. L. No. 101-649, 104 Stat. 4978. Washington, DC.
- UNDP. (2009a). Summary: *Human Development Report 2009: Overcoming barriers: Human mobility and development*. Retrieved from http://hdr.undp.org/en/media/HDR_2009_EN_Summary.pdf.

-
- UNDP. (2009b). *Human Development Report 2009: Overcoming barriers: Human mobility and development*. <http://hdr.undp.org/en/reports/global/hdr2009/chapters/>. Accessed 12 Apr 2012.
- United Nations. (2011). *Impact of Remittances on Poverty in Developing Countries* (UNCTAD/DITC/TNCD/2010/8). Geneva: United Nations.
- Upadhy, C., & Rutten, M. (2012). Migration, transnational flows, and development in India. *Economic and Political Weekly*, 47(19), 54-62.
- U.S. Department of Homeland Security. (2015). *Fiscal Year 2015*.
- U.S. Department of Homeland Security. (2015). *DHS yearbook of immigration statistics: Fiscal year 2015*. <https://www.dhs.gov/immigration-statistics/yearbook/2015>.
- United Nations. (2016). *International migration report 2015: Highlights*. Department of Economic and Social Affairs, New York: United Nations, (ST/ESA/SER.A/404).
- United Nations, Department of Economic and Social Affairs, Population Division. (2017). *International Migration Report 2017: Highlights* (ST/ESA/SER.A/404).
- United Nations. (2017). *International Migration Report 2017 Highlights*. Department of Economic and Social Affairs, New York: United Nations, (ST/ESA/SER.A/375).
- Ugargol, A., & Bailey, A. (2018). Family caregiving for older adults: gendered roles and caregiver burden in emigrant households of Kerala, India. *Asian Population Studies*, 14, 194 - 210. <https://doi.org/10.1080/17441730.2017.1412593>.
- United Nations. (2021). *International Migration Report 2020*. Department of Economic and Social Affairs, Population Division.
- Vertovec, S. (2007). Introduction: New directions in the anthropology of migration and multiculturalism. *Ethnic and Racial Studies*, 30(6), 961-978.
- Varma, R. (2007). Changing borders and realities: Emigration of Indian scientists and engineers to the United States. *Perspectives on Global Development and Technology*, 6(4), 539-556.
- Van den Berg, H., & Bodvarsson, Ö. B. (2009). *The Economics of Immigration: Theory and Policy*. Springer-Verlag Berlin Heidelberg.
- Van den Berg, H., & Bodvarsson, Ö. B. (2009). *The Economics of Immigration: Theory and Policy*. Springer-Verlag Berlin Heidelberg.
- Valatheeswaran, C., & Khan, M. I. (2018). International remittances and private schooling: Evidence from Kerala, India. *International Migration*, 56(1), 127-145.
- Visahelp. (2020.). Student visas. [Visahelp.us.com](https://visahelp.us.com). Retrieved from <https://visahelp.us.com/student-visas/>.
- Villanthenkodath, M. A., Mahalik, M. K., & Arafath, K. M. I. Y. (2022). The role of tourism development in India's environmental degradation: evidence from ARDL and wavelet coherence approaches. *Management of Environmental Quality: An International Journal*, 33(6), 1421-1438.
-

-
- Weeks, J. R. (1985). *Population and Issues* (8th ed.). San Diego, CA: San Diego State University.
- World Bank. (2005). *Global Economic Prospects 2006: Economic Implications of Remittances and Migration*. Washington, DC: World Bank.
- Willoughby, J. (2006). Ambivalent anxieties of the South Asian–Gulf Arab labour exchange. In *Globalization and the Gulf* (pp. 223-243). Routledge.
- Wadhwa, V., Saxenian, A., Rissing, B. A., & Gereffi, G. (2008). Skilled immigration and economic growth. *Applied Research in Economic Development*, 5(1), 6-14.
- Walton-Roberts, M. (2010). Student nurses and their migration plans: a Kerala case study. In *India migration report 2010* (pp. 196-216). Routledge India.
- Wells, M. (2013). The experiences of Indian nurses in America.
- Wadood, S. N., & Hossain, M. A. (2015). Impact of overseas remittances on economic growth: Evidences from Bangladesh.
- Walton-Roberts, M. (2015). International migration of health professionals and the marketization and privatization of health education in India: From push–pull to global political economy. *Social Science & Medicine*, 124, 374-382.
- WHO Regional Office for Europe. (2015). *Health of migrants: The way forward: Report of a global consultation, Madrid, Spain, 3-5 March 2010*. World Health Organization. Retrieved from <https://www.ncbi.nlm.nih.gov/books/NBK379428/>.
- Wills, B., Gan, S., Mindlin, J., & Sheerin, P. (2017). India to US Migration Case Study. *Elements*, 13(1).
- World Bank. (2017). *World Development Report 2017: Governance and the Law*. World Bank. Retrieved from <https://www.worldbank.org/en/publication/wdr2017>.
- World Bank. (2018). *World Bank Report*.
- Williams, J. P. (2019). Journey to America: South Asian Diaspora Migration to the United States (1965–2015). *Indigenous, aboriginal, fugitive and ethnic groups around the globe*, 97.
- World Bank. (2020). *World Development Report 2020: Trading for Development in the Age of Global Value Chains*. World Bank. Retrieved from <https://www.worldbank.org/en/publication/wdr2020>.
- World Bank. (2022). *World Development Report 2022: Finance for an Equitable Recovery*. Retrieved from <https://www.worldbank.org/en/publication/wdr2022>.
- Xia, Y. (2020). Correlation and association analyses in micro biome study integrating multiomics in health and disease. *Progress in molecular biology and translational science*, 171, 309-491.
- Yang, D., & Martinez, C. (2006). Remittances and poverty in migrants' home areas: Evidence from the Philippines. *International migration, remittances and the brain drain*, (3).
-

-
- Y-Axis. (2020). Indians account for almost 70% of the US Green Card backlog. Retrieved from <https://www.y-axis.com/news/indians-account-almost-70-us-green-card-backlog/>.
- Zachariah, K. C. (1968). Migrants in Greater Bombay. *Bombay: Asia Publishing House*.
- Zelinsky, W. (1971). The Hypothesis of the Mobility Transition. *Geographical Review*, 61(2), 219-249.
- Zachariah, K., & Rajan, S. (2001). Gender dimensions of migration in Kerala: Macro and micro evidence. *Asia-Pacific Population Journal*, 16, 47-70. <https://doi.org/10.18356/1A3A59DB-EN>.
- Zachariah, K. C., Mathew, E. T., & Rajan, S. I. (2001). Social, economic and demographic consequences of migration on Kerala. *International migration*, 39(2), 43-71.
- Zachariah, K. C., Mathew, E. T., & Rajan, S. I. (2003). *Dynamics of migration in Kerala: dimensions, differentials, and consequences*. Orient Blackswan.
- Zachariah, K. C., & Rajan, S. I. (2004). Gulf Revisited-Economic Consequences of Emigration from Kerala. *Emigration and Unemployment, project report submitted to Kerala Research Programme on Local Development (Thiruvananthapuram: Centre for Developmental Studies)*.
- Zachariah, K. C., & Rajan, S. I. (2007). Economic and Social Dynamics of Migration in Kerala, 1999-2004 Analysis of Panel Data.
- Zachariah, K. C., & Rajan, S. I. (2010). Impact of the global recession on migration and remittances in Kerala: New evidence from the return migration survey (RMS) 2009.
- Zachariah, K. C., & Rajan, S. I. (2012). Kerala's Gulf connection, 1998-2011: economic and social impact of migration. (*No Title*).
- Zachariah, K. C., & Rajan, S. I. (2015). From Kerala to Kerala via the Gulf: emigration experiences of return emigrants. In *India Migration Report 2015* (pp. 269-280). Routledge India.
- Zachariah, K. C., & Rajan, S. I. (2016). Kerala migration study 2014. *Economic and Political Weekly*, 66-71.
- Zong, J., & Batalova, J. (2017). Indian immigrants in the United States. *Migration Policy Institute*. Retrieved from <https://www.migrationpolicy.org/article/indian-immigrants-united-states-2015>.
- Zong, J., & Batalova, J. (2018). Mexican immigrants in the United States. *Migration Policy Institute*. Retrieved from <https://www.migrationpolicy.org/article/mexican-immigrants-united-states-2>.
- https://www.jmp.com/en_in/statistics-knowledge-portal/t-test/two-sample-t-test.html.
- <https://docplayer.net/29077384-The-car-analogy-the-economy-is-like-a-car-full-employment-industrial-v-3rd-world-nations.html>.
-

APPENDIX

Block-3. Household Details.

1	Do the HH have a ration card (Yes-1, No-2)		
2	If Yes, What is the colour (Yellow-1, Pink-2, Blue-3, White-4)		
3	What type of fuel is used for cooking Wood(W)-1, Electricity(E)-2, Kerosene(K)-3, LPG-4, W+E+K+LPG-5, W+E+LPG-6, W+E-7, E+LPG-8, Other (Specify)-9		
4	Type of house which the household is now occupying Luxurious-1 (Concrete/tile roof, tiled floor and 3 or more bedrooms with attached bathrooms, Very good-2 (2 bedrooms with attached bathrooms, mosaic floor), Good-3 (1 bedroom, brick and cement walls, concrete/tile roof), Poor-4 (Brick walls, cement floor and asbestos roof), Kutchha-5 (mud walls, mud floor and thatched roof)		
4.1	Type of house ownership (Own-1, Rented-2, Quarters-3, Others-4)		
4.2	Does the HH own the house elsewhere (Yes-1, No-2)		
4.3	Did you take any loan from Govt. or Bank or any other institution to construct or to buy your house (Yes-1, No-2)		
4.4	What is the approximate cost of construction of this house (Less than 1 lakh-1, 1 lakh to 5 lakhs-2, 5 lakhs to 20 lakhs-3, 20 lakhs to 50 lakhs-4, above 50 lakhs-5)		
5	Does any member of this HH own land (Yes-1, No-2)		
5.1	If Yes, total land owned (Cents). Specify the total land owned by the family before the emigration of a family member.		
6	Does the HH own any of the following (Yes-1, No-2)	Before migration	After Migration
6.1	Moto car		
6.2	Taxi/Truck/Lorry		
6.3	Motor Cycle/Scooter		
6.4	Mobile Phone		
6.5	Television		
6.6	Refrigerator		
6.7	Washing machine		
6.8	Microwave Oven		

6.9	Computer/Laptop			
6.10	Net Connection			
6.11	Air Conditioner (AC)			
6.12	Inverter			
7	Your Religion (Hindu-1, Christian-2, Muslim-3, Others-4 (Specify))			
7.1	If Hindu, Which cast do you belong to (Nair-1, Ezhava-2, Brahmin-3, Nadar-4, Viswakarma-5, Barber/Washerman-6, SC/ST-7, Others (specify)-8			
7.2	If Christian, Which denomination do you belong to (Syrian Malabar Catholic (RC)-1, Malankara Syrian Catholic (Reeth)-2, Latin Catholic-3, Jacobite Syrian-4, Orthodox Syrian-5, Marthoma Syrian-6, Pentecost-7, Other (Specify)-8			
7.3	If Muslim, Which seet do you belong to (Shia-1, Sunni-2, Others (Specify)-3			
8	Consumption expenditure		Last Month	Last Year
8.1	Expenditure on food items			
8.2	Non-food items			
8.3	Medical expenses			
8.4	Educational expenses			
8.5	Total expenditure in a month			
9	Total income in a month			
10	Total savings in a year			
11	Total investment			
12	Total debt, if any			

Block-4.Details of Emigrants.

1	Name of migrant		
2	Sex	Male:1, Female:2	
3	Age		
4	Marital Status:	Unmarried-1, Married-2 Widow/Wodower-3 , Divorced-4, Separated-5	
5	Educational Qualification	SSLC and Below -1, Plus two/PDC-2, Degree-3, PG-4, Technical-5, Other-6 (specify)	
6	How long has he been a migrant	Less than 6 months-1, 6 months to two Years-2, 2 to 4 Years-3, 4 to 6 Years-4, More than 6 Years-5	
7	Age at migration		
8	Place of destination	Middle East-1, Countries Other than Middle east-2 (specify the name of city)	
9	Is he permanently settled there	Yes:1, No:2	
10	If “Yes”, Number of years	Below 5 Years-1, 5-10 Years-2, More than 10 Years-3	
11	Job (Specify)		
12	Nature of life	With Spouse-1, Without Spouse-2, With Spouse and Children-3, Without Spouse but with Children-4, With Spouse but without children-5, Alone-6	
13	How much salary does he earn per month	10000-15000:1, 15001-25000:2, 25001-50000:3, 50001-100000:4, above 100000:5	
14	Monthly remittances by the Emigrant	Below 10000:1, 10001-15000:2, 15001-25000:3, 25001-50000:4, Above 50001:5	
15	Frequency of remittances	Once in a month-1, Once in two months-2, Once in three months-3, Other (Specify)-4	
16	Purpose of migration	To find job-1, To settle abroad-2, Educate children-3, Other (Specify)-4	
17	Has he acquired	Yes-1, No-2	

	Permanent Citizenship		
18	Does he possess any land	Yes-1, No-2	
19	If "Yes", where	Abroad-1, At home-2	
20	If "Yes" How much	Less than 10 cent:1, 10c-20c:2, 20c-50c:3, 50c-1 acre:4, 1-5 acre:5, Above 5 acre:6	

Block-4-A. Networks (Next, going to ask about people you may know, who have had the experience of working in a foreign country).

1	Do you know anyone who has migrated abroad for work within the last year? Yes-1, No-2	
2	Thinking about all the people you know who have worked in another country in the past year. How many do you know? 1-Twenty or more, 2-Ten to nineteen, 3-Six to Nine, 4-Two to Five, 5-One	
3	Thinking about the people you already knew in Receiving Country (RC), please think about the person you are closest to. What is their relationship to you? 1-Mother, 2-Mother in law, 3-Father, 4-Father in law, 5-Brother, 6-Brother in law, 7-Sister, 8-Sister in law, 9-Cousins, 10-Aunt, 11-Uncle, 12-Friend, 13-Neighbour, 14-Employer, 15-Other (Specify)	
4	To the best of your knowledge, what did they do in their job?	
5	In general, how much money do you think this person earns in a month in Receiving Country (RC)	
6	In general, how many hours a week do you think this person works in Receiving Country (RC)?	

Block-5. Women's Emigration.

1	Name of Emigrant	
2	When did she reach the current destination (Month and Year)	
3	Job and nature of the job? 1-regular long-term employee with monthly salary, 2-Self-employed, 3-Business, 4-Other	
4	Category of the employment 1-Government, 2-Private, 3-Other (Specify)	
5	How many hours does she work per day? 1-Less than 8 hours, 2- Eight to twelve hours (8-12), 3-More than 12	
6	Does the employer give annual leave with salary? 1-Yes, 2-No	
6.1	If Yes, How many days in a year	

7	What are the non-wage benefits she receives? (More than one answer is possible) 1-Food, 2-Shelter, 3-Gratuity, 4-Medical benefits, 5-Free air ticket, 6-Family visa, 7-Any other (Specify), 8-None	
8	Did she get offered salary? 1-Yes, 2-No	
9	If married, do her husband and children accompanied her? 1-Yes, 2-No	
9.1	If the children are not with her, where are the children residing? 1-With grandparents, 2-With father, 3-in boarding, 4-With others (specify)	
10	The amount required to meet her monthly expenditure? Amount:	
11	Did she face any problems with the employer? 1-Yes, 2-No	
11.1	If Yes, what was the problem? 1-Harsh behaviour, 2-Overtime work, 3-Gender discrimination, 4-Misbehaviour of the employer, 5-Other problem (specify)	
12	Is she satisfied with the current position/status? 1-Yes, 2-No	
13	Does she wish to come back and do job in Kerala? 1-Yes, 2-No	
13.1	If Yes, Reason (1-The destination country is not much attractive than earlier, 2-Not getting the salary offered, 3-Better wages in Kerala, 4-Any other (Specify))	

Block-6. Problems and Prospects (This block is exclusively for the Women whose husband is abroad).

1	Do you feel that your children will be far better in their studies if your husband is around? 1-Yes, 2-No, 3-Not applicable (NA)			
2	In the absence of your husband do you feel any of the following problems? (1-Yes, 2-No) (Multiple answers not allowed)			
2.1	Loneliness		2.5	Bringing up Children
2.2	Increased responsibility		2.6	Financial adjustments
2.3	Insecurity		2.7	Others (Specify)
2.4	Health of parents/in-laws			
3	If option 2.5 is selected, please mention the nature of the problems			
3.1	Disobedience		3.4	Lack of interest in studies
3.2	Misbehavior		3.5	Money mishandling

3.3	Stubbornness		3.6	Others (Specify)	
4	What is the nature of relationship with your in-laws? (1-Excellent 2-Normal, 3-Strained)				
5	In case somebody in the family has to be taken to hospital urgently, who does it? (1-Myself, 2-My parents, 3-My in-laws, 4-Others (Specify))				
6	Please mention good and bad experiences in your life due to the absence of your husband (Indicate your choice by ranking the Priorities.				
	6.1. Good Experience		6.2 Bad Experiences		
6.1.1	Financial benefits	6.2.1	Loneliness and isolation		
6.1.2	Could construct a house	6.2.2	Heavy responsibilities		
6.1.3	Bought gold ornaments	6.2.3	Worries about the education of children		
6.1.4	Purchased land	6.2.4	Debt problem		
6.1.5	Improved status	6.2.5	Insecurity		
6.1.6	Helped relatives/in-laws	6.2.6	Children's health problems		
6.1.7	Cleared debts	6.2.7	Anxiety and fear		
6.1.8	Improved lifestyle	6.2.8	Legal disputes		
6.1.9	Better education for children	6.2.9	Dependence on others (increased)		
7	All things considered, how satisfied or dissatisfied are you that your husband has migrated to work outside Kerala? (1-Extremely satisfied, 2-Very satisfied, 3-Satisfied, 4-Neutral, 5-Dissatisfied, 6-Very dissatisfied, 7-Extremely dissatisfied.				



Macroeconomic determinants of emigration from India to the United States

Rasheed M. Abdul¹ · Muhammed Ashiq Villanthenkodath² · S. Shibinu^{1,3}

Received: 21 August 2022 / Accepted: 2 November 2022
© Japan Economic Policy Association (JEPA) 2022

Abstract

Aiming to discourage the brain drain and encourage brain gain in India, this study empirically explores the impact of economic growth, human capital development and population density on the high-skilled emigration from India to the United States. Such an interaction between the variables via short- and long-run analysis has been conducted by using the Autoregressive distributed lag bounds testing framework during 1995–2019. It concluded that there is a long-run relationship between the study variables. Further, the evolved outcomes expose that India's economic growth is able to reduce emigration from India to the USA, while the human capital development and population density foster it both in the short and long run. Based on the finding, the study suggests a set of policies for discouraging the brain drain and encouraging brain gain in India.

Keywords Emigration · India · Economic growth · Human capital · Population density · ARDL

Introduction

In the world, India has the largest diaspora, with a diversified global presence of about 17 million [1]. It is observed that the North American region consists of nearly 3 million, while six Gulf Cooperation Council (GCC) countries contain 9

✉ Muhammed Ashiq Villanthenkodath
muhammedashiqv55@gmail.com

Rasheed M. Abdul
abdulrasheedibnu@gmail.com

¹ PG and Research Department of Economics, EMEA College of Arts and Science, Kondotti, Kerala 673638, India

² School of Social Sciences and Humanities, B.S. Abdur Rahman Crescent Institute of Science and Technology, Chennai, Tamil Nadu 600048, India

³ Department of Economics, Pocker Sahib Memorial Orphanage College, Tirurangadi, Kerala 676306, India