

Mapping the Scholarly Landscape: Irudaya Rajan Sebastian on Migration and Demography using Bibliometric Analysis

Shubham Kumar*, Aditya Raj

Department of Humanities and Social Sciences, Indian Institute of Technology, Patna, Bihar, India. *Corresponding Author's Email: shubham_2121hs16@iitp.ac.in

Abstract

This paper presents a bibliometric analysis of the scholarly contributions of Irudaya Rajan Sebastian, a leading expert in migration and demography, particularly in the Indian context. Currently serving as chair of the World Bank's Global Knowledge Partnership on Migration and Development (KNOMAD), Rajan has made significant academic and policy-level impacts through his work on labor migration, remittances, and social integration. His research offers critical insights into the causes, patterns, and consequences of migration, influencing both scholarly discourse and governmental decision-making. One of his most notable contributions is the Kerala Migration Survey (KMS), which he has led since 1998. The KMS provides comprehensive data on Malayali migrants in the Gulf, shedding light on the socio-economic effects of migration and the pivotal role of remittances in Kerala's economy. Rajan's advisory role to the Kerala government during the COVID-19 pandemic further underscores his applied expertise in migration policy. This study employs bibliometric tools, specifically the Biblioshiny interface of the Bibliometrix R-package and VOSviewer software, to examine the quantitative aspects of his academic output—highlighting citation patterns, research themes, and collaboration networks. In addition, a systematic review of selected works deepens the understanding of his thematic focus and policy relevance. By analysing both bibliometric data and content, the paper highlights the enduring significance of Rajan's contributions in shaping migration research and influencing policy debates in India and South Asia.

Keywords: Bibliometric Analysis, Gulf, Irudaya Rajan, Kerala, Migration.

Introduction

Irudaya Rajan Sebastian has emerged as a leading scholar in the domains of migration and demography, with his academic trajectory closely associated with the Centre for Development Studies (CDS), Kerala. He currently chairs the working group on internal migration and urbanisation within the Global Knowledge Partnership on Migration and Development (KNOMAD), an initiative of the World Bank. In recognition of his expertise, he serves on the expert committee advising the Government of Kerala on pandemic-related policy interventions. Rajan's scholarship spans a wide range of issues, including the demographic, economic, political, social, and psychological dimensions of migration. His research has been widely published in prestigious international journals, contributing significantly to both theoretical advancements and policy discourses. Since 2010, he has served as the editor of the India Migration Report, and since 2017, he has also overseen the South Asia Migration Report, both published by Routledge. In

addition, he is the founding Editor-in-Chief of Migration and Development, a Taylor & Francis journal. Through his sustained engagement with empirical research and policy-oriented scholarship, Rajan has played a pivotal role in shaping the academic field of migration studies in South Asia. This study aims to conduct a comprehensive bibliometric analysis of Irudaya Rajan Sebastian's scholarly contributions in the domains of migration and demography. Using tools such as Biblioshiny (based on the Bibliometrix R-package) and VOSviewer, the research explores the evolution of migration studies as reflected in Rajan's publications. It identifies major themes, citation patterns, and his influence within the academic landscape. The analysis also maps his geographical and institutional collaboration networks and evaluates the policy relevance of his research, particularly on labour migration, remittances, and social integration. Through a systematic integration of bibliometric and content review approaches, this study underscores the

This is an Open Access article distributed under the terms of the Creative Commons Attribution CC BY license (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted reuse, distribution, and reproduction in any medium, provided the original work is properly cited.

(Received 07th April 2025; Accepted 21st July 2025; Published 31st July 2025)

significance of Rajan’s work in shaping migration discourse and contributing to evidence-based policymaking.

Conceptual Framework

The study is anchored in a conceptual framework that integrates bibliometric analysis with migration studies, combining both quantitative and qualitative approaches to assess scholarly impact. It situates Irudaya Rajan’s work within broader migration theories, with a focus on labor migration, remittances, and social integration, particularly in relation to Gulf migration from Kerala and patterns of internal labor mobility in India. The bibliometric analysis draws on data from the Scopus citation database, utilizing tools such as Biblioshiny (based on the Bibliometrix R package) and VOSviewer to conduct citation analysis, co-authorship mapping, and keyword analysis. Key metrics considered include citation impact, author and institutional collaboration networks, and the thematic evolution of his work over time. Complementing this quantitative analysis is a systematic literature review that qualitatively examines selected works by Rajan, highlighting his contributions to migration policy and demographic research. This includes an exploration of how his research has informed government policies on labor migration, the COVID-19 response, and remittance-driven economic planning. Together, these elements provide a comprehensive evaluation of Irudaya Rajan’s academic output and its influence

on both migration scholarship and policy formulation.

This study employs bibliometric analysis to assess Irudaya Rajan’s scholarly contributions using data from the Scopus database. Biblioshiny (Bibliometrix R package) and VOSviewer are utilized for citation mapping, keyword analysis, and collaboration network evaluation.

Citation Database

Scopus, a citation and abstract database of peer-reviewed literature created by Elsevier, was used to retrieve Irudaya Rajan’s publications on migration. Scopus offers a thorough summary of the output of research conducted worldwide across various field.

Search strategy

On November 2, 2024, the search strategy was created, and on November 10, 2024, it was revised. Two search terms for "migration" and "Irudaya Rajan" were formulated to retrieve relevant publications. Every field from the Scopus search output was exported, including funding details (if available), abstracts, keywords, bibliographic information, citation data, and references. CSV was one of several formats into which the export was made for purposes of screening, classification, analysis, and visualisation. The dataset was cleaned to remove duplicates and unrelated entries before bibliometric tools were applied. The final selection focused on documents with direct relevance to Irudaya Rajan’s scholarly output in the field of migration studies.

Table 1: Main Information Obtained through Biblioshiny

Timespan	2001:2021
Sources (Journals, Books, etc.)	9
Documents	12
Document Average Age	7.5
Average citations per doc	13.83
Keywords Plus (ID)	23
Author’s Keywords (DE)	19
Authors	13
Co-Authors per Doc	2.25
International co-authorship %	16.67
Article	4
Book Chapter	7
Editorial	1

Table 1 summarizes the key bibliometric indicators pertaining to Irudaya Rajan’s scholarly output over the period 2001 to 2021. The dataset comprises 12 publications disseminated through

nine distinct academic sources, including peer-reviewed journals, edited volumes, and other scholarly platforms. The average age of these documents is 7.5 years, with a mean citation count

of 13.83 per publication, indicating a moderate yet consistent level of academic impact. The inclusion of 23 Keywords Plus and 19 author-defined keywords reflects a wide thematic distribution, particularly within the domains of migration, labor mobility, and remittance economies. The data further reveal a collaborative research orientation, with 13 authors contributing to the corpus and an average of 2.25 co-authors per document. Notably, 16.67% of the publications involve international co-authorship, suggesting a degree of transnational academic engagement. In terms of publication type, the dataset includes four journal articles, seven book chapters, and one editorial, demonstrating Rajan's diverse modes of scholarly dissemination across both empirical and policy-oriented platforms.

Bibliometric Analysis

The study used Biblioshiny and Scopus to analyse bibliometric data, such as authors, citations, publications, and journal sources. Lists of top publications, journals, authors, and author affiliations by nation, institution, publication type, and subject area are produced by Scopus'

integrated analysis function. In contrast, Biblioshiny, an open-source bibliometric tool based on the R programming language, provides metrics on collaboration within a country (SCP) and across countries (MCP). The study focuses on exploring the implications of Irudaya Rajan's academic contributions. Twelve selected literature pieces underwent bibliometric analysis, followed by a systematic review. The search for documents containing the terms "Irudaya Rajan" and "Migration" was conducted in the Scopus database, yielding twenty-three documents. After eliminating books and duplicates, twelve relevant documents were retained. The bibliometric analysis was carried out on these twelve documents using the Biblioshiny package from the Bibliometrix library in R, coupled with VOSviewer software. The primary areas of investigation included keywords, authors, sources, and countries of publication. The subsequent section provides a detailed breakdown of the country-wise analysis, a three-field plot illustrating authors, sources, and keywords, as well as the spatial and temporal distribution of the documents.

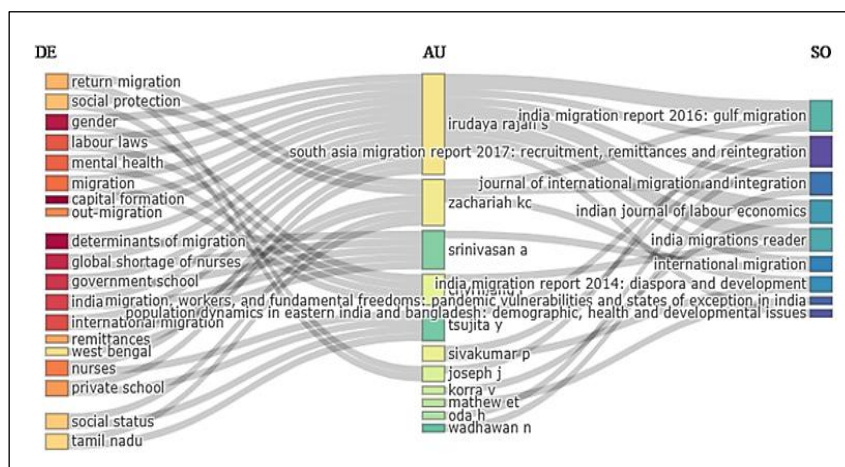


Figure 1: Three Field Plot of Author's Keywords (DE), Authors (AU) and Publication Name (SO)

Discussion

The three field plot from Biblioshiny has been derived with keywords (DE), author's name and source of publication (SO), as the three attributes in Figure 1. For the nineteen most predominant keywords, 11 authors and nine sources have been identified. These 19 pivotal keywords match the trend of scholarly articles which were written by Irudaya Rajan and co-authors. The terms such as migration, out migration, remittances, capital formations and other are prime concepts on which

Irudaya Rajan's work are based on. The prime journal publishing the documents could be identified as India Migration Report where the selected documents have been reflected through mentioned keywords. The source of publication and keywords as attributes is connected through the author's name. Biblioshiny has depicted the contributions of eleven authors whose work has been shown through 19 keywords and published in 12 sources. Among them, KC Zacharia has been extensively evident throughout his academic writings on migration and remittances.

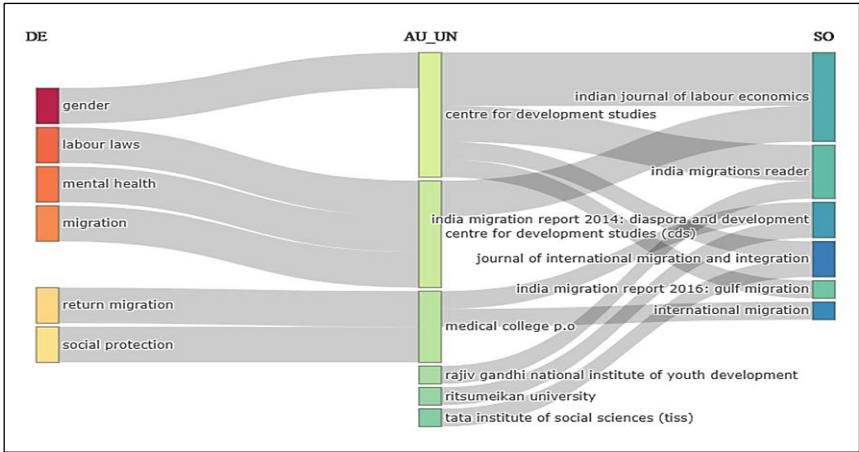


Figure 2: Three Field Plot of Author’s keywords (DE), Author’s Affiliation (AU_UN) and Publication Name (SO)

Figure 2 presents a three-field plot illustrating the interconnections among author keywords (DE), institutional affiliations (AU_UN), and sources of publication (SO) in the scholarly output of Irudaya Rajan and his collaborators. The visualization highlights six prominent thematic areas—gender, labour laws, mental health, migration, returns migration, and social protection—that underpin the selected body of work. These thematic nodes are closely associated with key institutional contributors, most notably the Centre for Development Studies (CDS), which appears as a central hub linking diverse topics with high-impact publication venues. CDS is particularly linked to themes such as gender, labour laws, and migration, and is associated with publication outlets like the Indian Journal of Labour Economics, India Migrations Reader, and India Migration Report

2014: Diaspora and Development. Other institutions—such as the Medical College P.O., Rajiv Gandhi National Institute of Youth Development, Ritsumeikan University, and Tata Institute of Social Sciences—demonstrate more specialized contributions, particularly in relation to return migration and social protection. The plot further reveals the distribution of Rajan's work across multiple interdisciplinary journals, including Journal of International Migration and Integration and International Migration, reflecting both domestic and international scholarly engagement. Overall, the figure underscores the thematic diversity and institutional breadth of Rajan’s research network, while illustrating how specific topics are channeled through key academic platforms and collaborative affiliations.

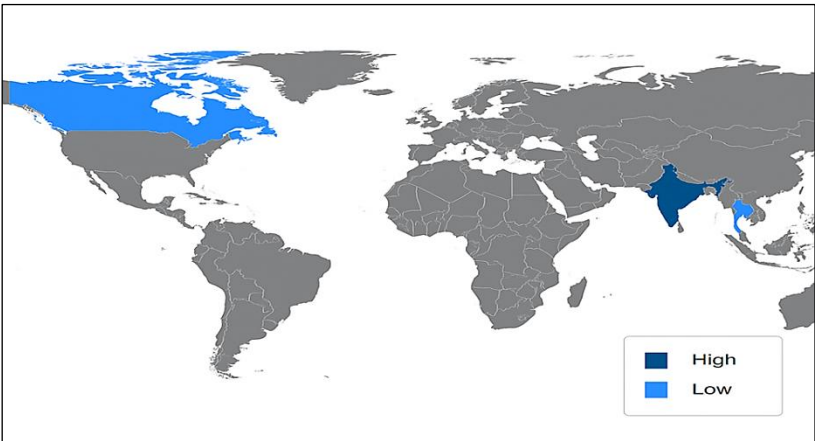


Figure 3: Country Wise Scientific Production

Figure 3 presents a world map highlighting the countries from which the author’s research articles have been published over a 20-year period (2001–2021). The map uses a two-tone blue color scheme:

dark blue indicates regions with a high number of publications, while light blue denotes regions with comparatively fewer publications. Grey areas signify no recorded publications from those

regions. The most prominent region of scientific production is India, shaded in dark blue, indicating that the bulk of the author's research work originates here. This aligns with the author's academic trajectory and institutional affiliations, which are primarily based in India. The strong presence suggests sustained research activity, local field engagement, and publication in both national and international outlets while being physically situated in India. In contrast, Canada and Thailand are marked in light blue, each representing a single publication. These limited entries may reflect short-term academic collaborations, conference proceedings, or co-authorship with scholars based in those countries. Their inclusion, although minor in volume, indicates the author's occasional participation in

global scholarly networks beyond South Asia. Japan also appears to be represented in the map with a lighter blue tone, similarly indicating a single publication. This suggests a minimal yet notable international research footprint in East Asia as well. Overall, the author's publication geography demonstrates a strong regional orientation towards South Asia, particularly India, while also reflecting limited international engagement through isolated publications in North America and Southeast/East Asia. The pattern may be attributed to the author's thematic focus, which likely centres on regional issues—possibly migration, caste, or labor—requiring local empirical fieldwork. The global spread, albeit limited, reflects the potential for expanding research collaborations in the future.

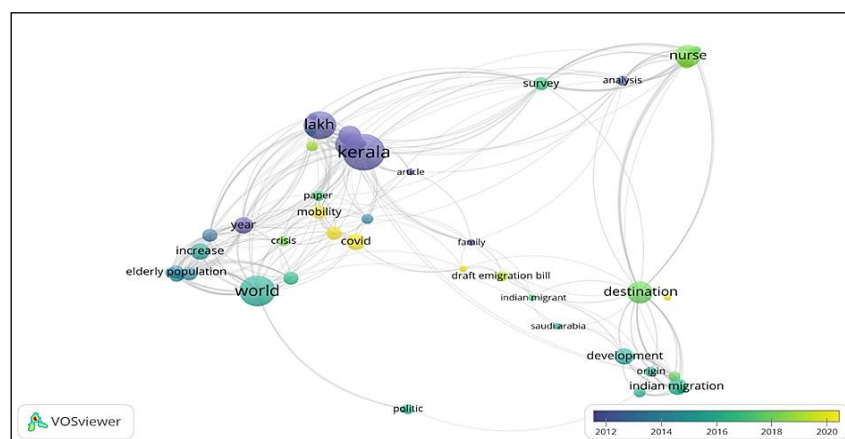


Figure 4: Temporal Analysis

The authors' work was subjected to temporal analysis using overlay visualisation on VOSviewer in Figure 4. Using average publication per year scores and term co-occurrence linkages, this functionality examines how research topics have changed from year to year in the retrieved literature over a specified time period. To depict time variance in keyword co-occurrences, the software uses a colour gradient that ranges from dark purple to yellow, where yellow indicates more recent areas of focus and dark purple indicates previously studied subjects. The timescale in Figure 4 covers the years 2001–2021, as the visualisation is based on the average year of publication of articles that contain particular terms. We can see from the figure how the author's main area of study changed over time. The dark purple portion on the left side of the timeline indicates that his early work focused on migration in Kerala. Around 2014, his research expanded to

explore the growing elderly population and its impact on global demographics. By 2016, his focus shifted to development, origins, and Indian migration. In 2018, he conducted surveys and analysed nurse migration patterns based on destination trends. More recently, in 2020, his research addressed themes of mobility, COVID-19, and the Emigration Bill.

Systematic Literature Review

Following the bibliometric analysis, this paper would focus its approach towards a systematic review. This section has been structured to note the applicability, nuances, and scopes generated from the screened documents. At this stage, records inclined towards the most deployed keyword of Irudaya Rajan have been kept as the parameter for retrieval. Drawing from the bibliometric analysis, it can be defined that there are three operative-words around which highest frequency of literatures have been authored.

COVID-19, Gulf Migration and Kerala Migration could have been pointed out for the most utilised keywords. Among these three, indication towards a concept is reflected through the term migration. Therefore, the systematic review has traced the publications rendered by migration. Additionally, the literature review has been developed with a particular emphasis on migration.

International Migration from Kerala

The Kerala Migration Survey 2014 estimated that approximately 2.4 million Keralites were living abroad that year. Between 1998 and 2011, this number increased from 1.36 million to 1.84 million, 2.19 million, and 2.28 million. In terms of return migration, there were 1.15 million Keralites who came home from abroad in 2011, 1.16 million in 2008, 890,000 in 2003, and 740,000 in 1998. Overall, there were 3.65 million non-resident Keralites (NRKs), or people who have lived outside of India at some time, compared to 3.43 million in 2011, 3.35 million in 2008, 2.73 million in 2003, and 2.1 million in 1998. These figures reflect a consistent increase in emigration from Kerala over time. The state has experienced substantial and enduring migration flows, establishing connections with countries in the Gulf and the West due to historical, cultural, demographic, and political factors, as well as longstanding economic ties. As in previous years, the Gulf countries remain the primary destinations for Keralan emigrants. Compared to 2011, the proportion of Keralan emigrants living in Gulf countries decreased by 2014. Nonetheless, with 38.7% of Kerala's emigrants going there, the United Arab Emirates continued to be the most popular destination.

In 2014, Kerala's proportional share of remittances declined to 37.5% from 38.7% in 2011. The Rs 43,288 crores in remittances received in 2008 had a profound impact on the state's economy and significantly improved the living standards of its residents. Notably, 88.5% of Kerala's emigrants chose to settle in the Gulf region, contributing substantially to the state's remittance inflows. With Kerala's population at 33.71 million, the 2008 remittances translated to an average of Rs 12,840 per person annually, rising to Rs 57,227 per household. This emphasises how important remittances are to Keralan households' yearly income.

Due to Kerala's close ties to the Gulf, emigration and remittances appear to be resilient even in the

midst of the current economic crisis. In conclusion, the Kerala Migration Survey of 1998 revealed that emigration, along with the subsequent remittances, was the most impactful force in revitalizing Kerala's otherwise dire economic situation during the final quarter of the twentieth century. During that period, remittances accounted for 25% of Kerala's Net State Domestic Product (NSDP). In Kerala Migration Survey (2008), ten years later, remittances made up 31% of the NSDP. There is one aspect of Kerala's emigration situation that is utterly static, despite the fact that everything about emigration from Kerala is dynamic. The percentage of households with an emigrant or those that have received remittances from overseas is completely stable at 16–18%. Since 1998, this ratio has not changed in any way. Over 80% of Keralan households, or the vast majority, still do not directly participate in this great phenomenon that is changing the state's economy and society. The question of how Kerala's Gulf connection can be made available to a wider range of Keralan households should pose a challenge to the state's planners and policy-makers.

A comparison of the occupational composition of migrants before and after migration revealed a significant upward occupational mobility as a result of migration. Since the 1940s, more people have been emigrating from Kerala. During the 1980s, the composition of the migration flows shifted from being dominated by outmigration to being dominated by emigration. The trend of outmigration has been declining, and net outmigration may soon become negative. As the number of people in Kerala in age groups that are susceptible to migration is likely to decline over the next few decades, a significant increase in emigrants may have an impact on future demographic trends in Kerala.

Rajan has also examined about the international migration of students. Numerous factors drive the rise in the demand for international students on a global scale. International students are greatly appreciated in the US and the UK for their readiness to cover higher living and tuition expenses. These costs can be up to three times greater than what domestic students in the host country pay, representing a substantial increase compared to what they would have incurred in their home countries. One of the main reasons

these universities recruit international students is that they improve their performance standards; this is important because it raises the universities' global ranking (1). India serves as both a major destination for international student migration and a key regional sending country. With more than 350 universities and 16,000 colleges, India boasts one of the biggest higher education systems in the world. There were 195,107 Indian students studying abroad. The United States, United Kingdom, Australia, New Zealand, and Russia are the top five countries in which Indian international students choose to study (2). The Institute of International Education reports that since the 2000-2001 academic year, India has consistently ranked as the top country of origin for international students in the United States. This observation aligns with Daniel Naujoks' 2009 country profile for the Migration Policy Institute (MPI) (3).

In middle-class Indian families, there is a tradition of sending children to study in the UK. Although this trend saw a temporary decline, it has rebounded in the past decade due to increased recruitment efforts by British universities, including student fairs held in India. Eight key factors influencing international student mobility: education costs, ideological alignment, language proficiency, the perceived academic quality of host institutions, exposure to new languages and cultures, improved job prospects, rising income levels in home countries, and simplified visa procedures (4). A major consideration for Indian students choosing a study destination is the high cost of education abroad. In the UK, tuition fees can be up to \$10,000 less for a comparable degree compared to the US (5). Despite this, UK is generally "more expensive overall" due to higher living costs, which can deter both Indian and other international students (6).

Gulf Migration

South Asia is becoming the global centre for migration. In 2005, 13.33 percent of South Asian migrants overall made up the international migrant stock; by 2015, that percentage had increased to 15.13 percent (7). A large number of migrants from South Asia opt to move to Gulf Cooperation Council (GCC) countries mainly in pursuit of job opportunities, yet this migration corridor between South Asia and the Gulf region remains largely unexplored despite its significant

global importance (8). 2.5 million Migrant workers are estimated to have left five major South Asian countries, with India accounting for the largest share of the outflow (9). Migration from South Asia results in remittances that have a major economic impact on the area. Twenty percent or USD 115 billion, of the USD 591 billion global remittance inflow in 2014 went to South Asia (10). Indians make up the largest expatriate community in Saudi Arabia, which also has the highest number of Indian passport holders worldwide.

The ongoing issue of irregular migration in the country has heightened socio-political tensions and security concerns. Migration is often intertwined with security debates, leading to its politicization and the criminalization and stigmatization of unauthorized workers. These migrants are frequently portrayed as threatening state sovereignty, autonomy, and cultural identity (11). Despite Saudi Arabia's recent efforts to reduce irregular migration through biometrics, detention, and enhanced border security, both international and irregular migration persist. In this context, Saudi Arabia's approach to irregular migration presents a paradox: strict border controls while managing significant human movement. The "clean-up campaign" represents the culmination of limiting border, migration, and labour policies aimed at limiting influxes and restricting migrant workers' residency, employment, and mobility. Since the early 1990s, Saudi authorities have prioritised labour localisation through quota-based programs to combat high domestic unemployment and increase Saudi citizen participation in the labour force (12). To address irregular migration and reduce domestic unemployment, Saudi Arabia has periodically implemented localization, expulsion, and regularization measures, similar to other Gulf states. The comprehensive Saudization policy aims to replace migrant workers with local employees, with a focus on youth employment, by making it more expensive and difficult for businesses to hire foreigners. In 2011, the Nitaqat policy was implemented as part of a larger effort to nationalise private-sector employment through a combination of restrictions, assistance, and incentives. Despite these regulatory measures, the nationalisation policy produced mixed results, with private-sector unemployment rising by 11.7% in 2015. 5.3 million Regularisation

procedures were completed in the first four months of the 2013 regularisation drive. This process primarily affected migrants without valid employment visas (13).

India is one of the world's largest suppliers of nurses, ranking second only to the Philippines. Many Indian nurses have left their home countries to work in the Gulf, OECD countries, and some ASEAN countries. Since India's independence in 1947, there has been a severe shortage of nurses, despite the fact that Indian nurses are migrating overseas to fill shortages where they are needed. The Indian healthcare system is thus seriously threatened by the widespread nurse migration. The global need for nurses has led to an increase in the long-standing phenomenon of nurses relocating overseas. India has long faced a severe domestic nurse shortage, a challenge persisting since independence in 1947 when the country had 1,402 nursing schools and 7,047 student seats. By 2013, these numbers had expanded to 49,197 institutions and 266,592 seats, with a total of 2,124,667 nurses employed (14). Initiated by Gulf oil companies that hired small groups of nurses, the migration of Indian nurses began in the 1940s and 1950s (15).

During the 1970s, a significant number of Malayali nurses from Kerala moved to Gulf countries, driven by the rapid expansion of hospitals due to the Middle Eastern oil boom. By the 1990s, there was a substantial outflow of Indian nurses, largely due to a severe shortage of nursing staff in developed nations. This growing demand prompted aggressive recruitment by Organisation for Economic Co-operation and Development (OECD) countries from developing nations like India. There were about 570,000 foreign-trained nurses working in 23 OECD nations in 2013. With 246,291 foreign-trained nurses in 2012, or roughly 6% of the nation's total nursing workforce, the United States had the highest percentage of foreign-trained nurses worldwide. This number is significantly higher than that of the UK, which among OECD nations has the second-highest proportion of nurses with foreign training (86,000 nurses in 2014). Furthermore, in 2010, Germany welcomed 70,000 nurses with foreign training. The start of this enormous international migration coincides with a dramatic increase in the number of nursing schools in India, the vast majority of which are private. Karnataka, Andhra Pradesh,

Kerala, and Tamil Nadu were among the southern states where this tendency was most noticeable. By 2015, Tamil Nadu had emerged as one of India's leading states for nurse production, with 382 schools offering both BSc nursing programs and diploma courses in general nursing (16).

In the Indian context, nurse migration is primarily driven by social, institutional, and economic factors. Numerous studies highlight economic factors as the most significant (17-20). Nurses in the GCC and other developed nations earn substantially higher wages compared to their Indian counterparts. For example, when adjusted for purchasing power parity, American nurses make 82.7% more money than their Indian counterparts (21). Due to lower pay than those in the public sector, nurses working in private hospitals in India are more likely to migrate (19,20). Furthermore, some Indian nurses are forced to look for work overseas in order to pay back the loans they took out to pay for their schooling (20). Therefore, financial obligations, low pay in private hospitals, and wage disparities all have a big impact on migration decisions.

Poor working conditions, such as low nurse-to-patient ratios and inadequate healthcare infrastructure are particularly important institutional factors (19,22). Limited career advancement opportunities further contribute to migration. India's reservation policy may enable nurses from Scheduled Castes and Scheduled Tribes (SC/ST) to progress more rapidly in their careers than those from higher castes, prompting many higher-caste nurses to seek opportunities abroad (19). Additionally, limited professional autonomy further incentivizes migration, as nurses in Indian hospitals often operate under a rigid hierarchical structure where doctors expect them to follow orders, restricting career growth (20,23). Social factors that contribute to nursing's low status as a profession in India include religious norms and the perception of impurity (19,22). Many Indian nurses migrate to nations where they are treated with more professional respect because they recognise the disrespect and subpar treatment they regularly experience in hospitals (20). Research indicates that nurses who migrate overseas often achieve higher social status, which enhances their value in the marriage market (24-27).

The Indian Supreme Court ordered the central government to establish a committee in January 2016 to look into the pay and living conditions of nurses working in private hospitals (28). The committee suggested that nurses in private hospitals with more than 200 beds be paid on par with those in government hospitals, and that nurses in hospitals with fewer than 50 beds be paid a minimum of Rs. 20,000 per month. While implementation has been inconsistent, there have been occasional strikes advocating for the minimum wage, representing a positive but challenging step forward (29).

Internal Migration from Kerala

Both the countries of origin and the countries of destination have seen new developments in international migration as a result of the global financial crisis. Emigration Clearances Required (ECR) data shows that Kerala was the most popular state for labour migration for a considerable amount of time. But as of the most recent ECR data, Uttar Pradesh has surpassed Kerala since 2009 and has maintained its top spot. According to ECR data, Bihar even passed Kerala in 2013; the trend is still present. In absolute terms, Saudi Arabia has continuously drawn the greatest number of Indian workers, with the exception of 1999 and 2002 (30). Gulf countries have continued to be the top destination for Indian workers over the years, according to labour emigration data. 96% of Indian migrant workers moved to one of the six Gulf nations as early as 2008. With 41% of Indian migrant workers, the UAE came in first, followed by Saudi Arabia with 27% (31). The global economic crisis and Saudi Arabia's implementation of the Nitaqat law have had a substantial impact on migrant workers since the release of the India Migration Report.

The global economic downturn has significantly impacted migration patterns for unskilled workers in the Gulf, as documented in the Ministry of Overseas Indian Affairs' annual reports (Ministry of Overseas Indian Affairs, 2010). In 2008, before the financial crisis, 349,827 unskilled workers migrated to the United Arab Emirates, while 228,406 moved to Saudi Arabia. However, by the following year, the number of workers heading to the UAE had declined by 198,104 (Ministry of Overseas Indian Affairs, 2010). Despite this drop, emigration to the UAE in 2014–2015 stood at 224,033, remaining below pre-crisis levels

(Ministry of Overseas Indian Affairs, 2011, 2012, 2013, 2014, 2015). In contrast, the number of unskilled workers migrating to Saudi Arabia steadily increased, rising from 228,406 in 2008 to 281,110 in 2009, 289,897 in 2011, and reaching 357,203 in 2012. After the implementation of the Nitaqat policy, this number slightly decreased to 329,937 in 2014–2015, a drop of 27,266 individuals. However, compared to the significant decrease in migration to the UAE due to the global economic crisis, the Nitaqat policy had a relatively minor impact on emigration to Saudi Arabia. According to the Census of India 2001, about 30% of the population in India consists of migrants. Migration has a substantial impact on the economy and way of life for a large percentage of the poorer population, as evidenced by the fact that the proportion of migration has tended to rise over time rather than fall (32). Expected migration is more common than actual income disparities between rural and urban areas (33). Nevertheless, push or distress factors from home, such as unemployment and natural disasters, low wages, debt, and droughts, also play a role in migration (34). The issue emerges when immigrants surpass the local population in employment opportunities and earning potential.

The most well-known instances of these attacks are those that occur in Mumbai (Maharashtra), Assam, and Meghalaya against migrants from Bihar and other North Indian states. Mumbai, India's commercial centre, draws a large number of migrants seeking work, a place to live, and business opportunities. The majority of the 15% increase in in-migration to Mumbai over the last ten years has come from countries outside the state. Political parties like the Maharashtra Navnirman Sena (MNS) and Shiv Sena capitalized on the issue of in-migrants for political gain, promoting the slogan "Mumbai for Mumbaikars." Preserving Marathi and insisting that eighty percent of jobs be held by locals are their top priorities. The Bhumiputra (sons of the soil) doctrine, which maintained that Maharashtra was a natural born member of the Marathi community, served as the foundation of the Shiv Sena's political strategy. After hearing Bala Saheb Thackeray's forceful anti-immigrant speeches, a considerable number of irate and frequently jobless Marathi youth joined the Shiv Sena (25). Therefore, in the 1970s, the Shiv Sena began attacking south Indian

communities in Mumbai, and the MNS began harassing migrants from north India, especially those from Bihar and Uttar Pradesh. The Indian Constitution's spirit is violated by these attacks. Nonetheless, there is still social unrest and dissatisfaction in society as a result of these attacks on migrants by their own citizens. Similar to Mumbaikars, the Goans began to worry those outsiders, or in-migrants, would cause them to lose their identity as a language and culture and incite social unrest. Thus, maintaining their cultural identity and preserving the Konkani language are their top priorities (35). Goans will become foreigners in their own country eventually. They will have to reflect on the risk they took and the harm they did to their hometown since they will be unable to identify themselves. It is asserted that the moment had arrived for Goans to become aware of their identity and take steps to protect it from the flood of immigrants (36). Over the course of human history, Assam has seen a wide range of groups of people from all over the country move there for a variety of reasons. As the coal, oil, and tea industries have expanded, so too has the demand for migrant workers. The majority of migrants are interstate and originate from Chotanagpur, Bengal, Orissa, Bihar, and Madras (37). Long-term interactions between the indigenous and in-migration cultures have resulted in the creation of a new class of people in addition to the indigenous tribal groups. The issue first emerged in the 1970s and 1980s as a result of concern over demographic change and resource competition. Certainly not the only factor contributing to the state's rising unemployment and poverty, in-migration was also related to efforts to preserve the ethnic and cultural heritage of the native tribal population. There was conflict when immigrants outperformed native-born individuals in terms of job, success in business, and money earning potential. The locals started to feel jealous of the immigrants now that they were in a worse position. Although non-tribal people in Meghalaya are not allowed to own land in their names by state law, they do profit from the marriage system. Thus, the majority of tribal people are in favour of the campaign against both in-migration and "non-tribal" settlers. The broad anti-non-tribal movement is supported even by most of the hill state's political parties. However, a political party that aimed to defend and protect

them emerged from the nontribal community. Many political parties demanded that anyone wishing to migrate to the state be required to obtain a work permit in order to slow down or manage the migration influx. Unfortunately, this political stance did not solve the issue; rather, it made it worse. Meghalaya and Assam, along with most other states in the region, have problems with foreigners. Migration policies need to be reinforced and put into place with the right procedures in order to give internal migration in India a safety net. The government's policy and action plans may be influenced by civil society's advocacy for migrant workers' protection.

Migration and COVID-19

COVID-19 pointed out two major concerns that migrants had to deal with: the economy and human health. It has challenged even the biggest economies and thrown the global economic order into a state of chaos. The COVID-19 pandemic has caused an unprecedented social and economic crisis, affecting nearly every industry and its workforce more profoundly than any other global pandemic since the 1900s (20). When focusing on migrant workers, the unskilled and semiskilled workers were the most severely affected because their daily source of income abruptly vanished. The prospects of immediate termination arose for migrants employed on a contractual basis in the informal sector. State governments were required to establish refugee camps and lodging for migrants, but proper implementation was lacking. People who were struggling financially were forced to walk hundreds of kilometres home while disobeying curfew laws. This resulted in the deaths of a few unfortunate people.

Migration has always existed in human history, and this is also true in India. India has historically had the highest rate of both voluntary and involuntary migration globally (38). There is examination of labor migration within the broader scope of rural-to-urban movement, highlighting the vulnerability of migrants in this region, particularly due to the risks of remigration following the COVID-19 pandemic and the ongoing phenomenon of return migration. The relationship between internal labour migration and reducing poverty in low-income nations has been the subject of several significant studies (39, 40). For the first time, migration's contribution to sustainable development is recognised in the 2030

Agenda for Sustainable Development (41). However, labour migrants are frequently forced into exploitative situations involving low-end, low-value, and dangerous work because they lack the necessary skills and bargaining power (42). Definitional errors in all forms of documentation pertaining to migrants in India pose a significant issue (43). Among these are the inadequate attention paid to gender issues or specific groups of migrants, like those who are temporary or circular migrants.

Over 90% of employed Indians currently work in the informal economy, with more than 80% of these workers, primarily migrants, concentrated in states such as Uttar Pradesh and Bihar (Patel, 2020). The largest percentages of respondents came from Bihar (25%), Jharkhand (28%), and Uttar Pradesh (13%), according to a 2020 survey conducted by the Stranded Workers Action Network (SWAN). This distribution implies that in the first few weeks after the lockdown, migrant workers from these states experienced significant difficulties. In addition, the states with the most Shramik trains carrying migrants in May were Uttar Pradesh and Bihar (44).

The COVID-19 pandemic has particularly impacted women migrants, despite the public discourse surrounding migration being largely masculinised. Particularly when it comes to government restrictions, discrimination, abuse, and exploitative behaviour, gender norms serve to reinforce their own barriers to migration. Nevertheless, significant social, educational, and economic challenges compel numerous women to migrate, both domestically and internationally. Marriage or related migration was the primary cause of internal female migration; however, many of those who did so went on to enter the workforce, despite the fact that surveys weren't able to fully capture this (45, 46). International Labour Organization estimates show that 58.2% of all jobs are held by women in the service sector (47). This industry has also been most affected by COVID-19, placing female migrants at a significantly higher risk than their male counterparts (48, 49).

During the two months following the lockdown, four out of ten working women in India lost their jobs, leaving over 17 million women without jobs (50). Due to the absence of gender-sensitive policymaking and a lack of inclusivity in the labor economy, the hardships faced by women migrants

have largely gone unreported despite their severe distress. It is imperative to bear in mind that a noteworthy proportion of migrant labourers are either temporary or seasonal migrants; 21 out of every 1000 migrants fell into this category in 2007–08 (51).

Since a significant portion of these migrants work in the unorganised sector, they are not eligible for social security benefits or even the most basic rights at work, making them one of the most vulnerable labour groups (52). More than half of all migrants in the nation are women. But whereas work or employment is the primary driver of migration for men, marriage or other related factors are the primary driver of migration for women. Marriage is the main reason for migration for many women; however, their employment status after marriage-related migration is often underreported and measured incorrectly because they often start working shortly after moving. Additionally, research indicates that an increasing number of women are migrating abroad or adopting more traditionally feminine appearances as a strategy to secure employment (53, 54). Furthermore, Research shows that women's movement is primarily focused on resistance against political, social, and economic forces as well as laws that impact women's outcomes and patterns of internal migration (55). Four in ten working women, or more than 17 million, lost their jobs in the first two months following the lockdown. Reverse migration is already taking place as a result of migrants' sudden loss of income, and it has the potential to slow the economy by 15 years, change development dynamics, and change the migration patterns of women. According to reports, many men and women, often with children in tow, have been observed walking hundreds of kilometres to reach their home countries (56). While some women gave birth while walking along the road and carried their new-born with them, others gave birth while travelling and passed away (57, 58). In India, there is a contentious cultural taboo around mental health. Research indicates that single, unskilled, and uneducated daily wage workers migrate more frequently, have less access to housing, and use unsatisfactory sanitary facilities (59). There will probably be a wide range of effects on migrant workers' mental health from COVID-19 and its associated restrictions. The pandemic

further heightened their vulnerability, as they were already at greater risk of contracting the disease and facing isolation from their support systems and families (60). It is evident that improved conditions for migrant workers—especially those working in the unorganised sector—do not always follow from the existence of legislation. As a matter of fact, the informal sector thrives on dodging regulations and legal pitfalls, especially in large, dispersed industries like manufacturing, construction, and textiles. Since most rural-urban migrants work in the informal economy as self-employed people or in the sector of casual wages, they are primarily not covered by social security (61). Despite the occasional visible source and destination, migrants are primarily invisible in the labour market. When it comes to social security, there is an obvious lack of coordination between the various Indian states. This study explores the gender dynamics, mental health, and social security protections of internal migrant workers, aiming to provide insights into the ongoing COVID-19 migrant crisis. Reliable data on internal migrants is essential for any meaningful response, as it would highlight worker groups that have remained largely unnoticed despite their significant presence. Due to their "neither here nor there" status, many migrants continue to be excluded from various government programmes. This is recommended by the intent-impact gap analysis of these schemes.

Conclusion

In conclusion, the work by Irudaya Rajan provides a comprehensive and empirically grounded understanding of the intricate dynamics and multifaceted challenges associated with migration in India. His scholarship is particularly relevant in the context of the COVID-19 pandemic, which has acted as a magnifying lens on the precarious conditions faced by migrants—both internal and international. The pandemic's sudden onset and the ensuing lockdowns laid bare the systemic neglect of migrant populations, revealing deep-rooted structural vulnerabilities within India's governance and social protection frameworks. Migrants, especially informal laborers, emerged as among the worst-affected groups, displaced from cities without income, shelter, or adequate state support. Rajan's work critically examines these developments, emphasizing the necessity for

comprehensive, long-term strategies that address not only the economic dimensions of migration but also its social, political, and human rights implications. His analysis of rural-urban migration patterns in India underscores the nation's dependence on a mobile labor force for low-wage urban employment, while simultaneously revealing the fragility of support systems during crises. Addressing poverty, Rajan argues, must be central to any meaningful intervention aimed at reducing migratory distress and inequality. Furthermore, Rajan's focused exploration of Kerala's migration trajectory—especially to Gulf countries—demonstrates the significance of historical, cultural, and economic linkages in shaping emigration flows. Gulf nations, particularly the United Arab Emirates, continue to be primary destinations for Kerala migrants, and Rajan highlights both the economic opportunities and social costs associated with this transnational migration. His research calls for a more robust and welfare-oriented diaspora policy, ensuring rights, dignity, and protection for Indian emigrants abroad. On a broader regional scale, Rajan's scholarship identifies South Asia, especially the South Asia-Gulf corridor, as a major axis of global labor migration. He underscores the critical economic role played by remittances and the need for deeper, data-driven studies to understand the political economy of this migration system. Additionally, his work brings attention to rising internal hostilities against migrants in India—exemplified by incidents in Mumbai, Assam, and Meghalaya—where exclusionary politics and identity-based mobilization have endangered migrant safety. These conflicts, rooted in perceptions of demographic pressure and cultural dilution, call for inclusive migration policies that balance economic integration with social cohesion. Importantly, Rajan advocates for institutional reforms and the development of well-defined procedures that safeguard internal migrants. His contributions argue for the expansion of state capacity to deliver social security, legal protections, and equitable access to basic services for migrant workers. In the wake of COVID-19 and amid India's pursuit of the Sustainable Development Goals, Rajan's scholarship stands out as an urgent and necessary intervention that bridges academic inquiry with policy relevance. Overall, his work offers a holistic and critical lens

on migration, combining macro-level policy insights with grounded empirical evidence. It urges a rethinking of migration not just as an economic phenomenon, but as a complex social process embedded in questions of identity, governance, labor, and justice. As India grapples with the long-term aftermath of the pandemic and prepares for future migration challenges, Irudaya Rajan's research offers invaluable guidance for policymakers, scholars, and civil society actors striving for an inclusive and equitable migration regime.

This bibliometric analysis of Prof. Irudaya Rajan's contributions offers a valuable resource for both future scholars and policy-makers. For researchers, the study provides a structured overview of Rajan's extensive body of work, enabling a deeper understanding of how migration research in India has evolved over time—particularly in relation to Gulf migration, remittances, internal displacement, and pandemic-induced mobility crises. It serves as a foundational reference for literature reviews, thematic mappings, and comparative scholarship within migration studies. For decision-makers, the findings underscore the role of evidence-based research in informing policy, particularly in areas such as labor regulation, internal migration governance, diaspora welfare, and social protection for vulnerable groups. This study also opens pathways for future research by encouraging similar bibliometric profiling of other prominent migration scholars from India and South Asia. Comparative analyses involving figures such as Binod Khadria, S. Irfan Habib, and emerging interdisciplinary voices can help construct a more comprehensive intellectual history of migration thought in the region. Such efforts can illuminate thematic trends—ranging from international labor mobility and gendered migration to identity politics and policy interventions—while also mapping collaboration networks and epistemic shifts within South Asian migration studies. Ultimately, this analysis not only documents scholarly impact but also serves as a springboard for further academic inquiry and policy engagement in migration discourse.

Limitations of the Study

While this bibliometric analysis provides valuable insights into the academic contributions and influence of Prof. Irudaya Rajan, certain limitations

must be acknowledged. First, the study is primarily reliant on indexed databases such as Scopus and Google Scholar, which may not capture the full spectrum of scholarly output, particularly books, policy briefs, regional publications, and vernacular contributions that are significant in the Indian academic context. Second, citation metrics and co-authorship patterns, while useful indicators of impact, may not fully reflect the qualitative depth or policy relevance of Rajan's work, especially given his extensive engagement with government committees, media, and civil society. Third, the analysis may be affected by database bias, such as the overrepresentation of English-language publications and the exclusion of grey literature. Additionally, the influence of self-citations and regional citation loops may inflate certain metrics. Lastly, this study focuses on a single scholar, and while it offers detailed insights, its findings cannot be generalized to the broader landscape of migration research in India without further comparative studies. Recognizing these limitations is essential for interpreting the results within their proper scope and for guiding future bibliometric inquiries in the field.

Abbreviations

CDS: Centre for Development Studies, COVID-19: Coronavirus Disease 2019, CSV: Comma-Separated Values, DE: Author's Keywords (Descriptor), ECR: Emigration Clearance Required, GCC: Gulf Cooperation Council, ID: Keywords Plus (Identifier), ILO: International Labour Organisation, KMS: Kerala Migration Survey, KNOMAD: Global Knowledge Partnership on Migration and Development, MCP: Multiple Country Publications, MPI: Migration Policy Institute, NRKs: Non-Resident Keralites, NSDP: Net State Domestic Product, OECD: Organisation for Economic Co-operation and Development, SCP: Single Country Publications, SO: Source of Publication, SC/ST: Scheduled Castes / Scheduled Tribes, SWAN: Stranded Workers Action Network, UN : United Nations, UNESCO: United Nations Educational, Scientific and Cultural Organization, UP: Uttar Pradesh, VOSviewer: Visualization of Similarities Viewer, WHO: World Health Organization.

Acknowledgement

The authors would like to thank the Department of Humanities and Social Sciences, IIT Patna, for

providing academic and institutional support throughout the research process.

Author Contributions

Shubham Kumar: conceptualized the study, conducted the bibliometric analysis, prepared the manuscript draft, Aditya Raj: provided research supervision, critical revision, academic guidance throughout the study. Both authors have read and approved the final manuscript.

Conflict of Interest

The authors declare that there is no conflict of interest regarding the publication of this paper.

Ethics Approval

This study did not involve any human or animal subjects and thus did not require ethical approval.

Funding

This paper is based on an ongoing project funded by the Indian Council of Social Science Research (ICSSR), with project number 02/185/2022-23/RP/MJ.

References

1. Khadria B. Skilled migration from developing countries: Study on India. *Int Migr Pap.* 2002;49. <https://www.ilo.org/publications/skilled-labour-migration-developing-countries-study-india>
2. UNESCO Institute for Statistics. Global education digest 2011: Comparing education statistics across the world. Montreal: UNESCO Inst Stat; 2011. <https://uis.unesco.org/sites/default/files/documents/global-education-digest-2011-comparing-education-statistics-across-the-world-en.pdf>
3. Naujoks D. Emigration, immigration, and diaspora relations in India. *Migr Inf Source.* 2009 Oct. <http://www.migrationinformation.org/Profiles/display.cfm?ID=745#5>
4. Varghese NV. Globalization of higher education and cross-border student mobility. Paris: UNESCO; 2008. http://www.unesco.org/iiep/PDF/pubs/2008/Globalization_HE.pdf
5. Verbik L, Lasanowski V. International student mobility: Patterns and trends. London: Observatory on Borderless Higher Education; 2007. https://nccastaff.bournemouth.ac.uk/hncharif/MathsCGs/Desktop/PGCertificate/Assignment%20-%2002/International_student_mobility_abridged.pdf
6. Mukherjee S, Chanda R. Indian student mobility to European countries: An overview. IIM Bangalore Research Paper No. 365. 2012 May 24. <http://dx.doi.org/10.2139/ssrn.2116198>
7. United Nations Department of Economic and Social Affairs. International migrant stocks by destination and origin. New York: UN DESA; 2015. <http://www.un.org/en/development/desa/population/migration/data/estimates2/estimates15.shtml>
8. Irudaya Rajan S. India migration report 2016: Gulf migration. New Delhi: Routledge; 2016.
9. International Labour Organisation. Labour market trends analysis and labour migration from South Asia to Gulf Cooperation Council countries, India and Malaysia. Geneva: ILO; 2016. <https://www.ilo.org/publications/labour-market-trends-analysis-and-labour-migration-south-asia-gulf>
10. World Bank. Annual remittance data. Washington DC: World Bank; 2015. <http://www.worldbank.org/en/topic/migrationremittancesdiasporaissues/brief/migrationremittances-data>
11. Longva AN. Keeping migrant workers in check: The Kafala system in the Gulf. *Middle East Rep.* 1999;1:20–2.
12. Alsheikh HM. Current progress in the nationalisation programmes in Saudi Arabia. GLMM Explanatory Note No. 02. Migration Policy Centre; 2015. <https://cadmus.eui.eu/entities/publication/81d4c773-a863-5348-b3e1-f416ee78c489>
13. Shah NM. Recent amnesty programmes for irregular migrants in Kuwait and Saudi Arabia: Some successes and failures. Explanatory Note No. 9/2014. Gulf Labour Market and Migration (GLMM) Programme, Migration Policy Center (MPC) and Gulf Research Center (GRC); 2014. <http://gulfmigration.eu>
14. World Health Organization. Global health observatory data repository. Geneva: WHO; 2016. <http://apps.who.int/gho/data/node.main.HWF1?lang=en&showonly=HWF>
15. Healey M. Indian sisters: A history of nursing and the state, 1907–2007. New Delhi: Routledge; 2013.
16. Nair S, Irudaya Rajan S. Nursing education in India: Changing facets and emerging trends. *Econ Polit Wkly.* 2017;52(24):38–42.
17. Alonso-Garbayo A, Maben J. Internationally recruited nurses from India and the Philippines in the United Kingdom: The decision to emigrate. *Hum Resour Health.* 2009;7:37.
18. Percot M. Indian nurses in the Gulf: Two generations of female migration. *South Asia Res.* 2006;26(1):41–62.
19. Thomas P. The international migration of Indian nurses. *Int Nurs Rev.* 2006;53(4):271–83.
20. Walton-Roberts M, Bhutani S, Kaur A. Care and global migration in the nursing profession: A North Indian perspective. *Aust Geogr.* 2017;48(1):59–77.
21. Rajan SI. India migration report 2010: governance and labour migration. 1st ed. New Delhi: Routledge India; 2010. <https://doi.org/10.4324/9781003157175>
22. Nair S. Moving with the times: Gender status and migration of nurses in India. New Delhi: Routledge; 2012. <https://doi.org/10.4324/9781003157953>
23. Timmons S, Evans C, Nair S. The development of the nursing profession in a globalized context: A qualitative case study in Kerala, India. *Soc Sci Med.* 2016;166:41–8.
24. Garner SL, Conroy SF, Bader SG. Nurse migration from India: A literature review. *Int J Nurs Stud.* 2015;52(12):1879–90.

25. Katzenstein MF, Mehta US, Thakkar U. The rebirth of Shiv Sena in Maharashtra: The symbiosis of discursive and institutional power. In: Basu A, Kohli A, editors. *Community conflicts and the state in India*. New Delhi: Oxford University Press; 1998:215–38.
26. Percot M, Irudaya Rajan S. Female emigration from India: Case study of nurses. *Econ Polit Wkly*. 2007;42(2):318–25.
27. Prescott M, Nichter M. Transnational nurse migration: Future directions for medical anthropological research. *Soc Sci Med*. 2014;107:113–23.
28. The Hindu. Set up panel to fix salary of nurses in private hospitals: SC. *The Hindu*. 2016 Jan 30. <https://www.thehindu.com/news/national/set-up-panel-to-fix-salary-of-nurses-in-private-hospitals-sc/article8181295.ece>
29. Times of India. Nurses hold protests over salaries. *Times of India*. 2017 Oct 17. <https://timesofindia.indiatimes.com/india/nurses-hold-protests-over-salaries/articleshow/61126355.cms>
30. Rajan SI, Joseph J. Adapting, adjusting and accommodating: Social costs of migration to Saudi Arabia. In: Rajan SI, editor. *India migration report 2013: social costs of migration*. New Delhi: Routledge; 2013. p. 139–53. <https://doi.org/10.4324/9781003157977>
31. Irudaya Rajan S, Prabha GR. India. *Asia Pac Migr J*. 2008;17(3–4):277–86. doi:10.1177/011719680801700303.
32. Kundu A. Migration and exclusionary urban growth in India. *Econ Polit Wkly*. 2012;47(26–27):219–27. <https://www.epw.in/journal/2012/26-27/special-articles/migration-and-exclusionary-urbanisation-india.html>
33. Todaro MP. Internal migration in developing countries: A review of theory, evidence, methodology and research priorities. Geneva: International Labour Organisation; 1976. https://webapps.ilo.org/public/libdoc/ilo/1976/76B09_496_engl.pdf
34. Lee SE. A theory of migration. *Demography*. 1966;3(1):47–57.
35. Sharma R. Migrant worries. *Frontline*. 2004 Nov 20–Dec 3. <https://frontline.thehindu.com/other/article30210293.ece>
36. Vaz A. Goan identity erodes with onslaught of migrants. *Merinews*. 2008. <http://www.merinews.com/article/goan-identity-erodes-with-onslaught-of-migrants/135616.shtml>
37. Griffiths P. The history of the Indian tea industry. London: Weidenfeld and Nicholson; 1967.p.8-19.
38. Tumbe C. *India moving: A history of migration*. Delhi: Penguin; 2018. <https://www.penguin.co.in/book/india-moving/>
39. Deshingkar P. Internal migration, poverty and development in Asia. *Dev Policy Rev*. 2006;24(4):499–514. doi:10.1111/j.1759-5436.2006.tb00272.x
40. Rajan SI, Sumeetha M, editors. *Handbook on internal migration in India*. New Delhi: SAGE Publications Pvt Ltd; 2020. <https://doi.org/10.4135/9789353287788>
41. Migration Data Portal. Migration & development: Sustainable development goals. 2019. <https://migrationdataportal.org/resource/migration-development-and-evaluation-where-we-stand-today-and-why>
42. Aajeevika Bureau. 2014. <https://www.aajeevika.org/labour-and-migration.php>
43. Nayyar G, Kim KY. India's internal labor migration paradox: The statistical and the real. World Bank Policy Research Working Paper 8356. Washington DC: World Bank; 2018. <https://openknowledge.worldbank.org/entities/publication/207a9a24-a7a2-5366-a294-f00f146a4a11>
44. Dastidar GA. Most Shramik trains: Gujarat, Maharashtra to UP and Bihar. *Indian Express*. 2020. <https://indianexpress.com/article/india/most-shramik-trains-gujarat-maharashtra-to-up-and-bihar-6432299/>
45. Prabhu N. Pandemic will deepen job and livelihood crisis of migrants: Study. *The Hindu*. 2020. <https://www.thehindu.com/news/national/karnataka/pandemic-will-deepen-job-and-livelihood-crisis-of-migrants-study/article31439073.ece>
46. Rajan SI, Sivakumar P. Youth migration in emerging India: Trends, challenges and opportunities. Delhi: Orient Black Swan; 2018.p.1-31.
47. World Bank. Employment in services, female (% of female employment) (modeled ILO estimate). World Bank; 2020. <https://data.worldbank.org/indicator/SL.SRV.EMP.L.FE.ZS>
48. Sapra I. Why don't we see the women? The untold story of COVID-19 migration. *Indian Express*. 2020. <https://indianexpress.com/article/opinion/why-dont-we-see-the-women-the-untold-story-of-covid-19-migration-6378557/>
49. Sharma P. Corona and the tragic dynamics of labour economics in India. *The Leaflet*. 2020. <https://theleaflet.in/corona-and-the-tragic-dynamics-of-labour-economics-in-india/>
50. Rukmini S. How COVID-19 locked out women from jobs. *Livemint*. 2020. <https://www.livemint.com/news/india/how-covid-19-locked-out-women-from-jobs-11591772350206.html>
51. Keshri K, Bhagat RB. Socioeconomic determinants of temporary labour migration in India: A regional analysis. *Asian Popul Stud*. 2013;9(2):175–95.
52. Srivastava R, Sutradhar R. Labour migration to the construction sector in India and its impact on rural poverty. *Indian J Hum Dev*. 2016;10(1):27–48.
53. Mahapatro SR. Internal migration: Emerging patterns. In: Rajan SI, Sumeetha M, editors. *Handbook of internal migration in India*. New Delhi: Publications Pvt Ltd; 2020. p.80-92.
54. Rajan SI, Neetha P, editors. *Migration, gender and care economy*. 1st ed. New Delhi: Routledge India; 2018. <https://doi.org/10.4324/9780429426704>
55. Mazumdar I, Agnihotri I, Neetha N. Gender and migration: negotiating rights, a women's movement perspective 2015. <https://doi.org/10.13140/RG.2.1.2395.0161>

56. Venkatraman T, Chauhan S, Dey S, Mishra R. In long walk back home, migrants battle hunger, scourge of COVID-19. Hindustan Times. 2020.
<https://www.hindustantimes.com/india-news/in-long-walk-back-home-migrants-battle-hunger-scurge-of-disease/story-TizRfUz69osjQ0Uqmm6jZN.html>
57. Press Trust of India. COVID-19 Lockdown 3.0: Migrant woman delivers baby enroute to UP on Mumbai-Agra highway at Madhya Pradesh's Barwani. First Post. 2020.
<https://www.firstpost.com/health/covid-19-lockdown-3-0-migrant-woman-delivers-baby-enroute-to-up-on-mumbai-agra-highway-at-madhya-pradeshs-barwani-8360291.html>
58. Singh SK, Patel V, Chaudhary A, Mishra N. Reverse migration of labourers amidst COVID-19. Econ Polit Wkly. 2020;55:32–3.
59. Firdaus G. Mental well-being of migrants in urban center of India: Analyzing the role of social environment. Indian J Psychiatry. 2017;59(2):164–9.
60. Choudhari R. COVID-19 pandemic: Mental health challenges of internal migrant workers of India. Asian J Psychiatry. 2020;54:102254.
61. Srivastava R. Labour migration in India: Recent trends, patterns and policy issues. Indian J Labour Econ. 2011;54(3):411–40.