Employment Related Emigration of Indian Labour in Pandemic Scenario: Evidence across Indian States

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Abstract

COVID-19 is a major source of social unrest and economic anxiety. COVID-19 not only caused sicknesses and worsened world health, but it also proved to be bad for the economy because it eliminated jobs and sources of income. Given this, the aim of the article is to examine how COVID-19 affects labourers who leave India in search of work overseas. The factors influencing job-oriented emigration from India to other countries are also examined in this study. Empirical study based on secondary data is facilitated by panel regression analysis. The empirical result indicates that there is no statistically significant negative impact of COVID-19 on the job-related emigration of Indian labourers. On the other hand, factors such as the Good Governance Index, the Labour Force Participation rate, and the Gross Enrollment Ratio significantly influence the labour emigration of Indians who are employed. The paper ends with appropriate policy recommendations.

Keywords: *COVID-19; Emigration; Employment; Panel data; Houseman test; and India.*

1. Introduction

The emergence of the novel coronavirus (COVID-19) is recognised as the most critical medical catastrophe in the world, including India. It is the most serious global disaster that humanity has faced since World War II (Chakraborty &Maity, 2020). This is because, despite having health apprehensions, the virus created an enormous number of challenges and casualties for humankind, especially the labour force. In fact, the recession emerged from COVID-19 and was labelled as the worst of the century because it exacerbated the negative consequences of the 2009 recession (Bhagat et al., 2020; Jomo& Chowdhury, 2020). Similar to any other recession, COVID-19 adversely affects the wellbeing of millions of workers around the world. On the one hand, the virus poses serious health risks, while on the other, it eliminates a source of income by impeding labour mobility and migration. According to the ILO report, about 25 million workers lost their jobs and became unemployed in the world as a result of COVID-19 in its initial phase, but the figure rose to 114 million by 2021 (ILO, 2020; 2021). India witnessed

DOI: http://dx.doi.org/10.62424/VUJE.2025.29.00.09

the first case of COVID-19 on January 30 in Kerala, and subsequently, it spread to almost every state of the country except Sikkim and Nagaland in the initial phase. However, the virus eventually arrests every state in the country. Among the affected states, Maharashtra is the worst-hit, followed by Tamil Nadu. Besides scant infrastructure, insufficient human resources, and inadequacy of medical staff, India is able to manage the low growth rate of the epidemic in comparison to the global rate (Chatterjee et al., 2020). This could be due to the Indian government's adoption of relevant steps at a very early stage of viral infection, which limits disease spread. In a sequence of policy responses, strategic lockdown policies along with the appropriate combination of monetary and fiscal policies are adopted to arrest the virus effectively (Mohanty, 2020). For instance, the Indian government declared a fiscal package worth INR 1.7 trillion to provide food security to poor families through direct cash transfers (Balajee, et al., 2020). Moreover, various relief packages have been announced for the welfare of the masses by the central government (Jha, 2020). Despite the government's tremendous efforts, COVID-19 emerged as a critical challenge to India's welfare and economic prosperity. In fact, India is recognised as one of the 15 most affected nations in the world due to COVID-19 concerning economic catastrophe (Koshle et al., 2020). It affects the welfare and employment of almost every section of society. Workers in the informal sector, such as farmers and daily wagers are the worst affected by the disease. Besides, small and marginal businesses are severely overburdened by the disease (Jha, 2020). According to the "The Centre for Monitoring Indian Economy" report, India's unemployment rate will reach nearly 8% by December 2021 (CMIE, 2021). The report again claimed that, among Indian states, the highest rate of unemployment was observed in Haryana (34.1%), followed by Rajasthan (24.1%), while the lowest figure was reported for Karnataka (1.4%). In many ways, the virus harmed laborers' health and livelihood. *Firstly*, the virus and the persistent lockdowns resulted in the loss of the livelihoods of millions of workers, which forced them to fall under the trap of poverty (EPW report, 2020). Second, the pandemic reduces workers' quality of life by reducing wages and access to social protection (Kannan & Khan, 2022). *Finally*, the crisis created by COVID-19 forced millions of workers, especially informal workers who lost their jobs, to return home with no income and no food security (Adhikari et al., 2020). In the absence of economic and social security and travel restrictions, the migrant faced a series of challenges, including police brutality and being forced to commit suicide (Dhorajiwala& Narayan, 2020). Among the returning migrant workers, females faced greater barriers and vulnerability compared to male migrants in India (Allard et al., 2022). At the same time, evidence of positive growth in the emigration of Indian labour created a paradoxical situation in India. The obvious fact is that we witness migration and reverse migration simultaneously (Tripathi, & Agrawal, 2022). Surprisingly, employment-related outmigration becomes a common phenomenon for almost every Indian state, even in the COVID-19 scenario (PLFS reports). Considering the importance of emigration for Indian labour, where job scarcity is the prominent delinquent, the virus created a series of implications. For starters, the restrictions associated with the virus's combat reduced the sources of employment for unemployed Indian laborers. Second, labourers who migrate to other countries for work expose themselves to severe health consequences and face a variety of barriers. To comprehend the economic effects of COVID-19, a large number of works are required. But the specific issue of the impact of COVID-19 on job-related emigration is not properly addressed. This backdrop motivates us to explore the twin objectives. Initially, the paper plans to explore the influence of COVID-19 on employment-related emigration from India to other countries. In addition, the paper attempts to uncover the other determinants of job-oriented emigration from India to other countries.

The study is structured in the aforementioned ways: after the brief introduction, the methodology of the paper is discussed in Section 2. Results and Discussion of the Paper are

DOI: http://dx.doi.org/10.62424/VUJE.2025.29.00.09

presented in Sections 3 and 4, respectively. Lastly, the conclusion and policy prescriptions of the paper are produced in Section 5.

2. Data and Methods

2.1. Data

This entire study is based on secondary data from diverse secondary sources. The study employed data from two annual periods 2020 and 2021 covering 28 states and 6 UTs (except Dadra and Nagar Haveli, Daman and Diu, and Ladakh). The choices of the study period and the states as well as UTs are strictly dictated by the data availability. The Emigration Clearances for Jobs is utilised to proxy the job related emigration. The data for endogenous variable that is emigration is retrieved from 'Ministry of External Affairs'. The data to Covid-19 positive cases are compiled from 'Ministry of Health and Family Welfare, GOI'. The data related to Inflation rate (IR), and NSDP per capita are collected from Handbook of Statistics on the Indian Economy, RBI. Other control variables such as Total Gross Enrolment ratio higher education (TGER), Labour force participation rate (LFP), and Good Governance Index (GGI) are collected from All India survey on higher education, Periodic Labour Force Survey, and Good Governance Index (Assessment of State of Governance) respectively. The descriptions of the variables along with data sources are presented in table-1.

Table-1: Description of the variables

Variables	Definition	Type of variable	Source
Emigration (EMG)	Shows state-wise number of Emigrants for whom Emigration Clearances is obtained by RA.	Dependent	Ministry of External Affairs (https://emigrate.gov.in)
Covid-19 cases (COVID)	Displays the number of persons affected by Covid-19 virus.	Independent	Ministry of Health and Family Welfare, GOI
Inflation rate (IR)	Shows the rate of increase in prices during a particular period of time.	Control	Handbook of Statistics on the Indian Economy, RBI
NSDP per capita (NSDP)	Shows per capita Net state domestic product (in Rs.) at 2011–2012 (constant) prices	Control	Handbook of Statistics on the Indian Economy, RBI
Total Gross Enrolment ratio higher education (TGER)	Shows the number of persons of age 18-23 years enrolled in higher studies (from class 11).	Control	All India survey on higher education
Labour force participation rate (LFP)	Represent the rate of working age population (15-59 years) participated in labour force.	Control	Periodic Labour Force Survey
Good Governance Index (GGI)	Indicates the overall performance of governance in moving towards positive direction.	Control	Good Governance Index. Assessment of State of Governance

Source: Authors' own specification

DOI: http://dx.doi.org/10.62424/VUJE.2025.29.00.09

2.2 Methodology

The test of stationarity is very necessary to conduct any regression. But, earlier studies like Liao, & He, (2018) exhibits that, the test of unit root is not necessary in case short panel. Hence we have not conducted the test of unit root test due short data period in our study (2020-2021). Accordingly, we focus on selecting appropriate regression model. As present study is based panel data, it is customary to select suitable effects model. The choice of the regression model is guided by the Hausman specification test. This test is based on Chi square statistic.Null hypothesis of the test is Random Effects model is appropriate. Alternative hypothesis is Fixed Effects model is appropriate. However, as our data short panel for our data set Random Effects model will be appropriate (Bhaumik, 2015). Moreover, unlike fixed effects model, random effects model considers the "*variance of means across the levels of a random factor"*(Menegaki, 2011). Since India is characterised as second largest populated countries with huge heterogeneity, the variables like emigration and COVID-19 perceived as random variables. Consequently, Random Effects model will be more appropriate model for regression analysis. It is noteworthy that in the post estimation we will check the appropriateness of adopting Random Effects Models for the regression analysis by applying Hauman test. Assuming Random Effects Models for the regression analysis the regression equation is presented as follows:

$$EMG_{it} = \alpha_{it} + \beta_1 COVID_{19_{it}} + \beta_2 INF_{it} + \beta_3 NSDP_{it} + \beta_4 GER_{it} + \beta_5 LFPR_{it} + \beta_6 GGI_{it} + u_{it} + \varepsilon_{it} \quad (1)$$

Where, EMG, COVID-19, INF, NSDP, GER, LFPR, and GGI represent job related emigration, Covid-19 cases, Inflation rate, NSDP per capita (constant), Total Gross Enrolment ratio higher education (18-23), Labour force participation rate (15-59), and Good Governance Index respectively. Again, U_{it} and ε_{it} shows the 'Between entity error' and 'Within-entity error' respectively.

3. Results

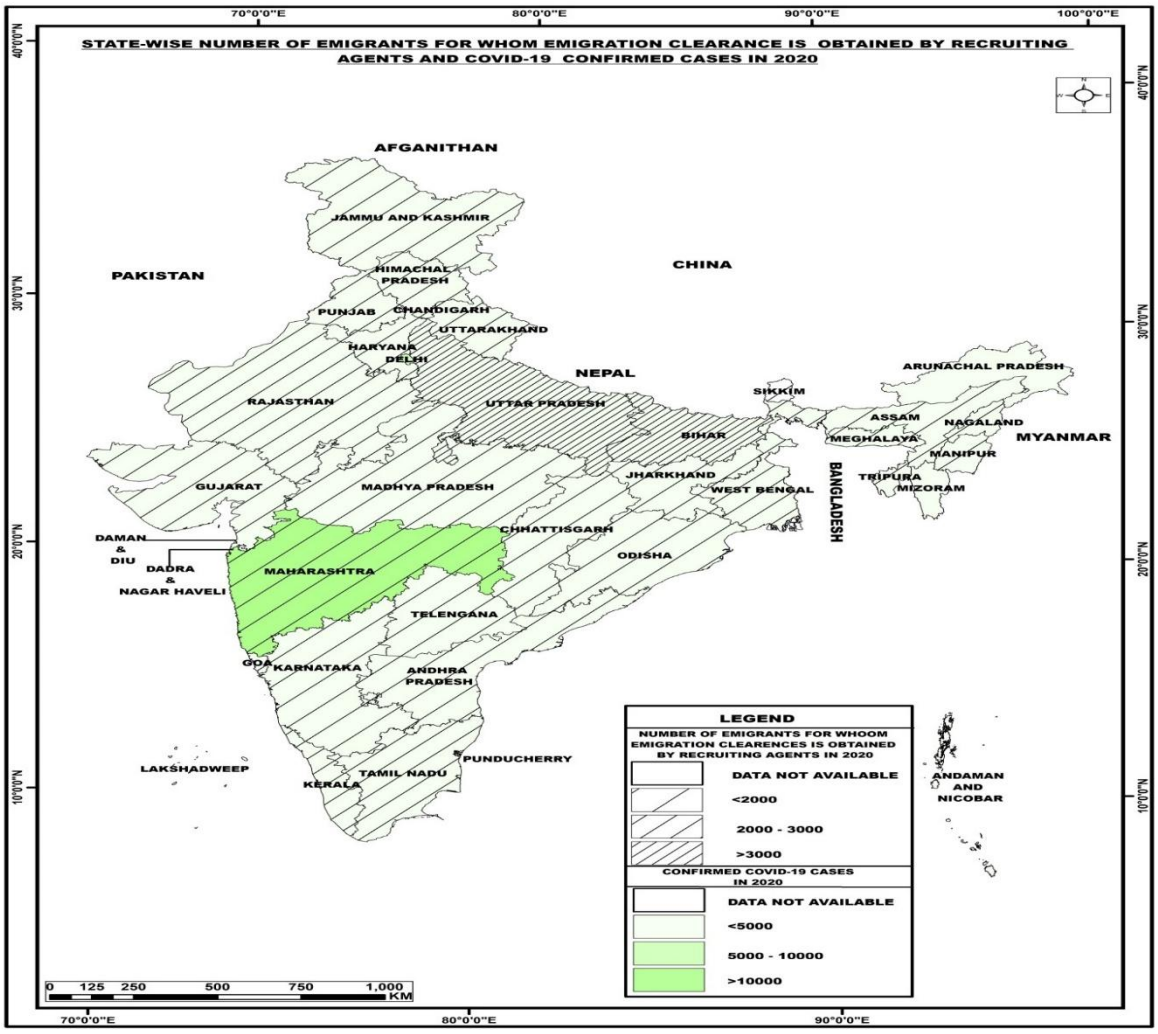
3.1 State-wise scenario of Emigration and Covid-19 in India

India is recognised as the largest contributor of world demographic dividend (Singh, &Paliwal, 2015).The country needs to create enough opportunities for channelizing these large numbers of working age population (15-59 age-groups) to productive activities (Singh, and Kumar, 2021). However, the scarcity of resources creates obstacles for skilled labours to utilise their skills appropriately (Ricciardi, et al., 2021). Consequently, India experiences brain-drain, job searching emigration for both skilled and unskilled labour (Saxenian, 2005).Emigration is the most significant option for Indian unskilled and blue collar jobs labourers to get employment and earn handsome wages (Kumar, 2012). In fact, emigration not only provides the scope of employment for Indian labourers but also it act as vital source of foreign income which ultimately accelerates income of the domestic country (Noushad, et al., 2020). Conferring to the latest report by the 'Ministry of Overseas Indian Affairs (MOIA), the most important hubs for India's emigration that provides employment are United Arab Emirates, Kuwait, Afghanistan, Malaysia, Lebanon, Bahrain, Indonesia, Iraq, Jordan, Oman, Qatar, Saudi Arabia, Sudan, Syria, Thailand, Yemen, Libya,and South Sudan (Chanda, &Gupta, 2018). Among these countries the most common destination for occupation related emigrations are Kingdom of Saudi Arabia (KSA) and United Arab Emirates (UAE) (Abella, & Sasikumar, 2020). Together these countries account more than 60 per cent of overall employment allied emigration (Kumar, &Rajan, 2015). However, emergence of recent pandemic of COVID-19 significantly influences the job seraching emigration from India due to travel restrictions, lockdown, health issues, and job scarcity etc. (Jesline, 2021). The globe witnesses reverse emigration due to worldwide pandemic scenario (Tripathi, & Agrawal, 2022). The working-age population who returned home due to pandemic, decided to return back to serve their earlier

DOI: http://dx.doi.org/10.62424/VUJE.2025.29.00.09

employer with the stabilization of the pandemic waves. Subsequently it will be interesting to explore the relationship between confirmed COVID-19 positive cases and job searching emigration. The following Choropleth maps provide the State-wise scenario of India's employment allied emigration and COVID-19 in 2020 and 2021. Fig.1 the choropleth maps are presenting the corresponding figures of both confirm positive cases up to May 2020 and number of emigrants for whom emigration clearances are obtained by recruiting agents in 2020.

Fig.1: State-wise scenario of India's employment allied Emigration and COVID-19 in 2020



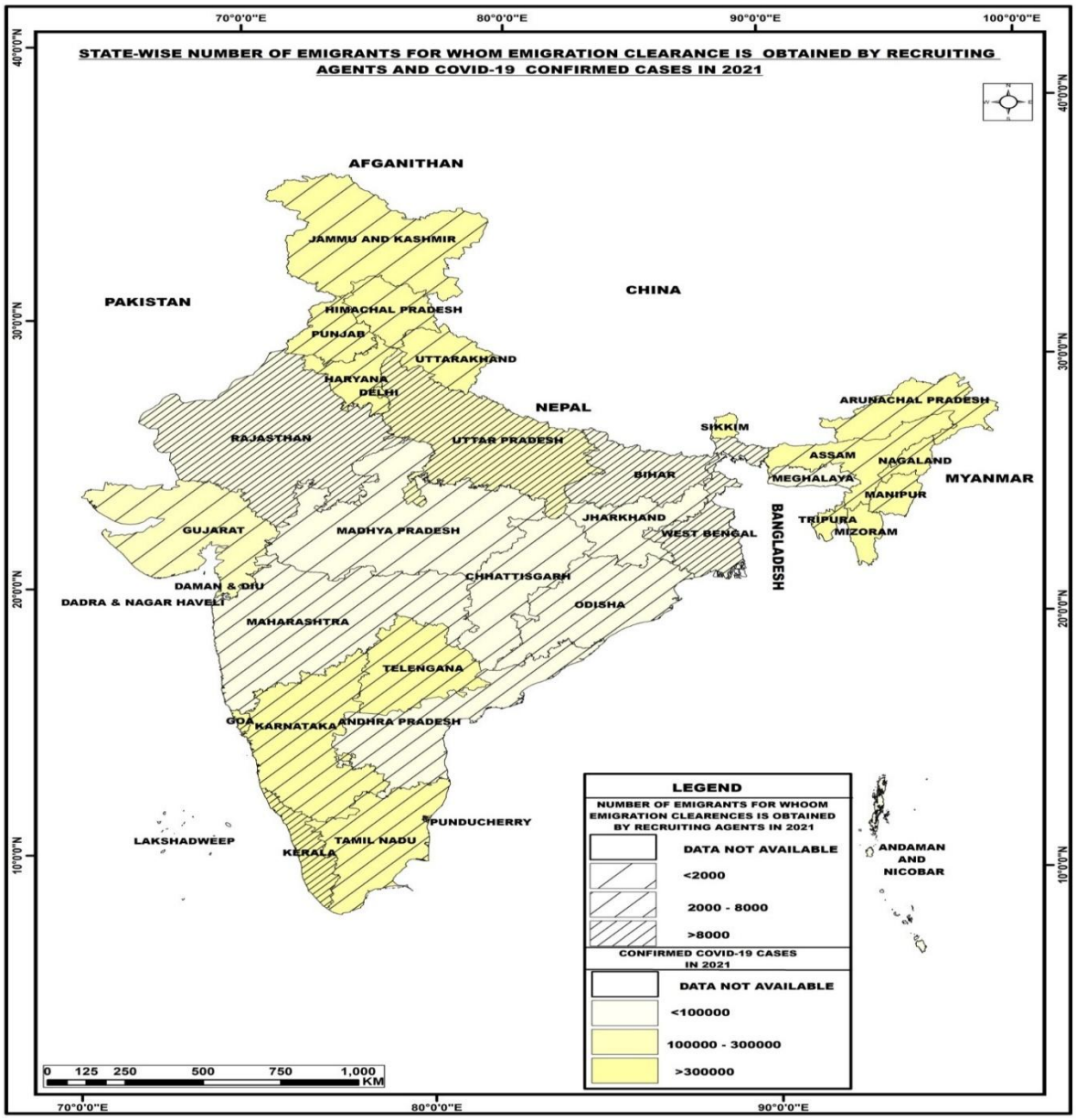
Source: Authors' own presentation by choropleth map

Figure-1 exhibits that, job allied emigration is maximum in Uttar Pradesh in 2020. The state is followed by Bihar, and Kerala. Conversely, lowest figure is obtained for Mizoram. The high number of job-allied emigration in Uttar Pradesh is attributed to high unemployment and lack of employment opportunities (Sarkar, 2020). It is the most populous state of India with inflated number of poor (about 22% of total poor of the country) (Census, 2011). Lack of employment opportunities are forcing the working-age population to migrate to other countries in search of jobs (Singh, & Kumar, 2021). On the contrary, concerning the confirmed COVID-19 positive cases up to May 2020, the state ranked 19th among 33 Indian states in 2020. It is noteworthy that different waves of COVID-19 did not appear same time to all states of India. In fact, Uttar Pradesh experienced COVID-19 waves at the latter periods(Kar, et al., 2021). Concerning emigration the 3rd position is occupied by Kerala and it is that state where fist COVID-19 positive case in India was detected on January 27, 2020 (Andrews, et al., 2020). The person

who was recorded first COVID-19 positive in India was a travel history from China (Andrews, et al., 2020). Maharashtra is that state which reported highest number of confirmed positive COVID-19 cases up to May 2020 and it ranks 10th concerning job searching emigration. However, Maharashtra is in fact a destination for emigrants from other countries because of the film industry (Rao, et al., 2013). The same argument is also true for Delhi, ranked 2nd concerning confirmed COVID-19 positive cases up to May 2020 in India. Utter Pradesh and/ or Kerala experiences severity of the disease at the latter period. In fact, to restrict the spread of the disease in Indian, Indian government announced nationwide lockdown on the evening of 24 March 2020, initially for 21 days (Gettleman& Schultz, 2020). The worst hit states from COVID-19 have records of low rate of emigration and thus low rate of reverse migration also. Again a close perusal of Fig.2 divulges that, there is not much disparity in the pattern of employment allied emigration in India in 2021. Similar to 2020, highest emigration is recorded for Uttar Pradesh,while lowest figure is observed for Mizoram. According to United Nation, (2020), concerning International migration India is the upmost country in the world. Same report further claimed that, the pandemic of COVID-19 slowed the growth of Indian international migrants due to lack of employment opportunities, wage-cut and many other factors. But at closer glimpse, we observed substantial rise in the magnitude of emigration in 2021 compare to 2020. The number of job allied emigration increased significantly in almost every state except Assam, Chhattisgarh, Jammu and Kashmir, Madhya Pradesh, Sikkim, Tripura, and Uttarakhand. On the contrary, with reference to COVID-19 cases up to May 2021, we recognise massive dissimilarity in the infected cases among the states. In the corresponding year, almost every state of the country is affected by the virus. Among the states, Kerala records highest number of COVID-19 positive cases and interestingly, it secures 4th position in respect of job related emigration. Although the state reports increase in the number of employment oriented emigration by 2021, we observe slower growth in emigration pattern. Himachal Pradesh is that state which reports second highest number of confirmed positive COVID-19 cases up to May 2021 and it reports lower growth in job searching emigration.Conversely, the third most COVID-19 affected state, Jammu and Kashmir reports negative growth in emigration. The states like Bihar, Rajasthan, and Uttar Pradesh etc., with moderate number of positive COVID-19 cases, report considerable growth in job searching emigration in 2021.This may be due to the fact that, all these states are considered as poorest states of India (NITI Aayog, 2022). The pandemic has further placed them at severe threat of long-term poverty and unemployment. Consequently, the working age population of these states are forcefully migrating to other countries for employment at the risk of contagion and life threat because of COVID-19.

DOI: http://dx.doi.org/10.62424/VUJE.2025.29.00.09

Fig.2: State-wise scenario of India's employment allied Emigration and COVID-19 in 2021



Source: Authors' own presentation by choropleth map

Finally, figure-1 and figure-2 altogether confirm that, the states with high number of coronavirus cases recorded lower emigration compared to less affected states. This may because that the states where influence of COVID-19 were marginal the corresponding government had started unlocking and easing restrictions by May 2021. On the contrary, the states with high corona virus cases have continued lockdown and restrictions (Times of India, May 2021). Therefore the workers (specially unskilled and blue collar jobs labourers) from less affected states who are left out from social and economic security nets migrate to other countries in search of employment with slight reduction in restrictions. The movement of people from one country to another is one of the major causes of spreading of this highly contagious disease globally (Castelli, &Sulis, 2017). In fact, job allied emigration is the prime cause of spreading COVID-19 worldwide (Chakraborty, &Maity, 2020). The adverse

DOI: http://dx.doi.org/10.62424/VUJE.2025.29.00.09

circumstances force these emigrants to return back to their home country and after the improvement of the CIVID-19 scenario to their destination countries they returned back. Undoubtedly, COVID-19 restricts job allied emigration forcefully (Awasthi, & Mehta, 2020). Regardless of the fear of COVID-19, these working-age groups decided to move back to their employer country with marginal improvement of COVID-19 scenario. This indicates there are other factors whose positive influences are so strong that outweigh the fear of COVID-19 concerning job allied emigration decision. The objective of the present paper is the identification of the determinants of job allied emigration under COVID-19 scenario. This choropleth map analysis indicates further analysis is required to know the prevalence and determinants of international job allied emigration under COVID-19 scenario.

3.2 Interregional variation in Emigration in India

India with 1.2 billion populations can be designated as the nation of diversities in world (Mandal, 2015). It comprises of 28 states and 9 Union Territories (UTs). Each of the states and UTs are dissimilar in terms of their culture, identity, social and economic backgrounds (Rao, 2008). Owing to these dissimilarities, the influence of any crisis is realised differently among different demographic territories in India. Therefore, the examination of interregional variation in employment allied emigration during COVID-19 era in India is truly interesting. To comprehend the regional variation in emigration pattern, we have utilised non-parametric Analysis of Variance (ANOVA). The outcome of ANOVA is shown in the Table-2.

Table-2: Interstate variations in emigration in India, ANOVA

Source of Variation	SS	df	Mean Square	F	P-value
Between Groups	2650577537.00	32	82830548	28.316***	0.000
Within Groups	90680894	31	2925190		
Total	2741258431	63			

Source: Authors' own calculation based on secondary data
Note: df represents degrees of freedom.

The result of ANOVA presented in Table-2 discloses that, the null hypothesis of no significance variation in employment allied emigration is not accepted. It can be explained by fact that, the F statistic (F= 28.316) with (32, 31) degrees of freedom is found be significant at less than 1 per cent level. Therefore, it suggests that, there is significant variation in the pattern of employment allied emigration across the states of India during COVID-19 period. Further, during the pandemic, highest variation in emigration is noted for Assam while lowest variation is recorded for Meghalaya, and Mizoram. Thus, the result of ANOVA confirms that, the pattern of employment related emigration varies not only across states but also within the states of India. The variation of emigration pattern across Indian states is owing to dissimilar lockdown and restriction policies embraced by different states.

3.3 Relationship between Emigration and Covid-19 in India

After understanding the state-wise scenario of COVID-19 and the emigration pattern, we now contemplate examining the relationship between emigration and COVID-19 in India. Initially, a simple correlation analysis is performed to better understand the relationship between these two variables. The corresponding result (Table-3) for India shows a negative relationship between employment-related emigration and COVID-19. Unfortunately, the relationship is not statistically meaningful, as reflected by the low value of t-statistics. The result is paradoxical, as a universally accepted fact is that there is a negative association between employment-related emigration and COVID-19. Consequently, we need a more in-depth investigation to identify the interconnection between these two variables. In fact, decisions concerning employment-related emigration depend on various social-demographic-economic factors. A

simple correlation may fail to capture such a complex interaction. Moreover, correlation techniques scrutinise only the degree of association between two variables, which offers merely part of the analysis. The veritable correspondence between employment-related emigration and COVID-19 can only be understood through comprehensive analysis. Accordingly, we conducted multiple regression analysis.

Table-3: Association between covid-19 and emigration in India (from 2020 to 2021)

Correlation coefficient	t statistics (Prob.)
-0.01	-0.07 (0.93)

Source: Authors' own calculation based on secondary data

As mentioned earlier, decisions concerning employment-related migration depend on various social-economic factors. The role of COVID-19 may be regarded as a shock to the migration decision. Thus, to have a complete notion of the association between employment-related migration and COVID-19, we consider a set of regressors which are supposed to influence migration decisions. Moreover, the non-parametric ANOVA corroborates the existence of regional variation in employment-related emigration. Accordingly, identification of the determinants of employment-related emigration across Indian states is necessary. Based on earlier literature, we have included several regressors to facilitate regression analysis. The definition and data sources of regressand and regressor are described in table-1.

The appropriateness of the regression result depends on the data heterogeneity to confirm representative information. The descriptive statistics of regrssand and regressors confirm the validity of the primal condition for regression (see table-A.1 in the appendix).

3.4 Friedman's test for cross sectional independence

The empirical analysis of the present paper is performed based on the strongly balanced panel data for two years covering 28 Indian states. Earlier literature argued that, panel data model might exhibit cross-sectional interdependences across errors (Baltagi, 2005;Pesaran, 2006). If so the estimators will be both biased as well as inconsistent. Thus the independence of cross-sectional error is an apriori condition for the applicability of the panel data model. The present paper utilises Friedman's test to test the *independence of the cross-sectional error*. The test result is presented in table-4.

Table-4: Friedman's test of cross-sectional independence

Friedman's test of cross-sectional independence	Average absolute value of the off-diagonal elements	Probability
1.125*	1.000	1.0000

Source: Authors' own calculation based on secondary data

*Evidence shows data are cross-sectionally independent

The table discloses that the value of *Friedman's test of cross-sectional independence* (1.125) and the corresponding value of the "*Average absolute value of the off-diagonal elements*" (1.00) are not statistically significant. Thus, we accept null hypothesis of no cross-sectional dependence. According we proceed to investigate our said objectives.

Hausman test: Random effects vs. fixed effects model

The appropriate choice of the panel data is necessary, because if the selected model is not well specified, then the estimated coefficient will provide misleading outcome and hence policy formulation will be biased (Andreß, 2017). The Hausman specification test is conducted for facilitating the identification of the panel data model. The acceptance of the null hypothesis indicates that random effect estimators are both consistent and efficient while fixed effect estimators are only consistent not efficient. The result of the test is presented in Table-5:

DOI: http://dx.doi.org/10.62424/VUJE.2025.29.00.09

Table-5: Hausman Test to choose between Random Effects and Fixed Effects Model

Variables	Coefficients		Difference (b-B)	χ_{13}^2	Prob $> \chi^2$
	Fixed effects	Random effects			
Covid-19 cases	-0.0001	-0.0003	0.0002	4.88	0.2999
Inflation rate	226.8976	154.1036	72.7940		
NSDP per capita (constant)	-0.0363	-0.0377	0.0014		
Total Gross Enrolment ratio higher education (18-23)	563.4472	87.6157	475.8315		
Labour force participation rate (15-59)	105.0676	-311.2868	416.3543		
Good Governance Index	1440.8430	1640.5790	-199.7365		

Source: Authors' own calculation based on secondary data
*Evidence shows Random Effects model is appropriate.

The test result reveals that the corresponding $\chi_{13}^2 = 4.88$ with Prob $> \chi^2 = 0.2999$. This predicts random effects model for our panel data.

3.5 Impact of COVID-19 on emigration in India

The effect of COVID-19 on the job allied emigration of Indians is analysed in this section. The regression result is presented in table-6.

Table-6: Random-effects GLS regression and Fixed-effects (within) regression of stochastic production frontier function for whole panel(No of Observations: 171)

Random-effects GLS				Fixed-effects (within)		
Variable	**Coefficients**	**S.E**	**t-ratio**	**Coefficients**	**S.E**	**t-ratio**
Constant	15054.03	9181.12	1.64	-24040.59	27316.20	-0.88
Covid-19 cases	-2.80E-04	3.37E-04	-0.83	-1.21E-04	3.79E-04	-0.32
Inflation rate	154.10	151.27	1.02	226.90	187.45	1.21
NSDP per capita (constant)	-0.04	0.02	-2.4**	-0.07	0.03	-2.04
Total Gross Enrolment ratio higher education (18-23)	202.17	87.62	2.31**	963.45	454.31	2.12
Labour force participation rate (15-59)	-311.29	127.87	-2.43**	105.07	290.26	0.36
Good Governance Index	-1640.58	766.45	-2.14**	-2540.84	1298.98	-1.96
R^2 *(Within)*	0.173			0.240		
R^2 *(Between)*	0.328			0.013		
R^2 *(Overall)*	0.321			0.011		
Sigma_u	5586.108			9743.709		
Sigma_e	1628.515			1628.515		
Rho	0.922			0.973		
Observations	64			64		

Source: Authors' own calculation based on secondary data
*Note: ***, **, * significance at 1%, 5% and 10% respectively*

Table-6 discloses that, confirmed COVID-19 positive cases negatively influence the job-related emigration decision. However, the magnitude of corresponding estimated coefficient is very low and not statistically meaningful. Implicitly, this means the negative impact of

COVID-19 on employment related emigration for Indian labour is not justifiable. Paradoxical indeed, it is opposing a universally accepted negative influence of COVID-19 on employment-related emigration. Consequently it may further imply that, COVID-19 indirectly impact Indian labourers to emigrate for employment. This can be explained by fact that, the emergence of COVID-19 and industrial lockdown drastically wrecked the source of livelihood and employments (Bhagat, et al., 2020). Under the condition of lack of employment opportunities, poor and unemployed labours have no choice but forced to emigrate from India to other countries for employment opportunities. Thus, for a highly populated countries with higher proportion of working age population COVID-19 can restrict outer migration temporarily. However, without creating proper employment opportunities it is impossible to restrict job allied out migration from India. To understand this complex relationship between COVID-19 and job allied emigration from India we need to extend our model by incorporation some variable which are supposed to influence the job allied migration decision of the Indian labour. To understand such complex relation we have included following variables: Inflation rate (IR), NSDP per capita (NSDP), Total Gross Enrolment ratio higher education (TGER), Labour force participation rate (LFP), and Good Governance Index (GGI). These variables are recognised as *control* variables. Among the control variables, the coefficient of NSDP per-capita (-0.04) is found negative and statistically significant. This implies that rise in per-capita income negatively influence job related emigration. This may be because higher per-capita income is generally associated with higher production and more job opportunities. Similarly, Good Governance Index negatively and significantly influence job allied emigration decision of the Indian labour. As expected, the coefficient of Labour force participation rate of working age is also negative and significant. This indicates that, if more labours get employment and participate in the labour market, there is less likelihood for them to be immigrated to other countries for employment. On the contrary, total gross enrolment ratio in higher education positively and significantly influence job related emigration. This is because higher education not only improves skills and capability of the people but also opens up new opportunities in the international labour market (Haapanen, &Bockerman, 2013). Consequently, a person with higher education is more likely to migrate for better livelihood. The detail analysis of the results is presented in the discussion section.

5. Discussion

India is the largest contributor of the demographic dividend to the world (Singh, &Paliwal, 2015). Unfortunately, India lacks the resources to engage this young age population in productive activities (Dougherty, et al., 2010). Consequently, this young age population leaves India in search of better employment opportunities according to their educational qualifications and technical know-how. According to United Nations only in 2020, almost 18 million people in the country living outside their homeland (The Economic Times, Jan 15, 2021). In fact, India has the largest diasporas population in the world. The most popular destinations for Indian migrants are the United Arab Emirates (3.5 million), the United States of America (2.7 million), and Saudi Arabia (2.5 million) (The Economic Times, Jan 15, 2021). Australia, Canada, Kuwait, Oman, Pakistan and the United Kingdom are the other hosts of Indian migrants. The COVID-19 pandemic is a worldwide phenomenon. COVID-19 hits all the countries around the globe and the common way to stop the spread of this highly contagious disease is the *lockdown*. Under such circumstances, we witness reverse migration and people coming back to their home countries. When the waves of COVID-19 are allayed, these emigrants moved to their working place even after knowing the fact that the waves of COVID-19 may rebound once again. Under such circumstances, it will be appropriate to explore the influence of COVID-19 on the emigration of labours from India to other countries in search of a job. Together with that, it will also be interesting to explore other determinants of job-oriented emigration from India to

DOI: http://dx.doi.org/10.62424/VUJE.2025.29.00.09

other countries. This is exactly performed in this paper. The empirical analysis is performed based on panel data and the determinants are explored by panel regression analysis. The regression results disclose that confirmed COVID-19 positive cases negatively influence the job-related emigration decision. Surprisingly, the corresponding estimated coefficient is not statistically meaningful. The possible reason is also revealed in the same table. The influence of the other factors on the emigration decision is so strong that banishes the fear of COVID-19 contamination. The other determinants are- *NSDP per capita (constant)*, *Total Gross Enrolment ratio higher education (18-23)*, *Labour force participation rate (15-59)* and *Good Governance Index*. The effects of all these determinants are statistically meaningful. The higher NSDP transmitted better economic opportunities and open new avenues for the educated skilled working-age populations. Higher NSDP means better employment as well as better self-employment opportunities for the working-age population (Maity& Sinha, 2018; Gindling, & Newhouse, 2014). Accordingly, working-age populations stay in their home state and perform economic activities (Gindling, &Newhouse, 2014). Similarly, good governance means appropriate utilization of the state fund, less corruption, better health and educational system etc. Consequently, good governance like higher NSDP opens new avenues for working-age populations; equip them with good health, education and skills and gives them new opportunities (Neumayer, 2003). Obviously, if anyone gets opportunities according to his/ her skill and qualification within the state he/ she will continue to work there and never thinks to emigrate to other countries in search of better job opportunities, particularly in the COVID-19 scenario (Nabin, et al., 2021). This is the reason for the negative significant relation between *NSDP per capita (constant)* and *emigrations* and *Good Governance Index* and *emigrations*. An escalation of the labour force participation rate means that the working-age populations can find a job (Schiffel, & Blair, 1977). No one is interested to leave their home country, particularly when the world is under the COVID-19 threat. This is the reason behind the negative significant influence of *the Labour force participation rate (15-59)* on *emigrants*. Education in the present paper is proxied by the *Total Gross Enrolment ratio for higher education (18-23)*. We have considered only the gross enrolment in higher secondary level with the idea that higher education results in skill formation. With higher education, people want better employment opportunities. In search of better opportunities sometimes highly educated and skilled person immigrates to other countries (Kumar, 2012). Indian students visit abroad for higher education also. In this respect, the USA, Canada, Australia, and Germany are the main destinations for Indian students (Wadhwa, 2016). After education, they settled there and started doing the job (Altbach, 1991). This is the main reason for the positive significant influence of *the Total Gross Enrolment ratio higher education (18-23)* on *emigration*. Perhaps all these other determinants are so strong that sweep the negative influence of COVID-19 when the spread of COVID-19 is under control. However, when the waves of COVID-19 are very strong the reverse migration stated as all find a home is the safest place in the world (Ratha, et al., 2020). Consequently, the statistical insignificance of the negative relationship between confirmed COVID-19 positive cases and emigration is only valid when COID-19 is under control otherwise such relation is no doubt significantly negative.

6. Conclusion and Policy implications

The present paper explores does the job searching emigration continues even within the COVID-19 scenario or not. Before exploring the relationship between job searching emigration and confirmed COVID-19 positive across Indian states we scrutinize the regional variation of job searching emigration across Indian states. The non-parametric ANOVA result confirms the existence of interstate variation concerning job searching emigration across Indian states. Simple correlation analysis enables us to identify the primary existence of the meaningful relation between job searching emigration and confirmed COVID-19 positive cases across the

Indian state. Based on the secondary panel data across Indian states the study observes that there is a negative correlation between job searching emigration and confirmed COVID-19 positive cases across Indian states. No surprise is there about this result. However, what is surprising is that this correlation is statistically insignificant. This empirical result motivates us to conduct in-depth research for exploring the said relation. As the present study is based on the panel data panel regression will enable us to recognize the complex inter-relation between job searching emigration and confirmed COVID-19 positive cases. In fact, the regression result tells us the complete story. We observe that the other factors which are influencing the job searching emigration decision so strongly that even after in COVID-19 scenario skilled labour from Indian states is deciding to move on in search of a job in foreign countries. The factor which is infusing the job searching immigration decision positively is the '*Total Gross Enrolment ratio in higher education (18-23)*'. According to Lucas, (1988) and Romar, (1990), education and health are two main components to transform humans into human capital. This means these two are the main ingredients for the transformation of labour to skill labour (Lucas, 1988;Romar, 1990) and according to our study skilled labour prefers to leave the country even within the COVID-19 scenario for a better job as well as knowledge opportunities. However, some of the factors are there whose higher values may restrict skilled labour to the country in search of a job, suchlike *NSDP per capita (constant)*, *Labour force participation rate (15-59)* and *Good Governance Index*. These variables are in negative relation with the job searching emigration. Most interestingly, although confirm COVID-19 positive cases are in negative relation with the job searching emigration, unfortunately once again the empirical result is statistically meaningless. This means that in the COVID-19 scenario although restricting the citizens to leave the country in search of a job this fear is not as strong as the other decisive factors until the scenario becomes severe. The outbreak of COVID-19 creates an alarming atmosphere and stops the spread of the disease. Under such circumstances, people prefer to return to their country. However, marginal improvement of the scenario motivates them to return to their working place. When COVID-19 is mushrooming people decide to go back to their home countries to guarantee social as well as economic pretension, otherwise they prefer to move on. It is always preferable that we will be able to encourage our country people to stay in the country and serve the country, by providing them opportunities according to their capabilities. India is the largest contributor to the world demographic dividend and it is the responsibility of the competent authorities to create enough opportunities as well as to provide enough resources so that these young skilled people can do their duties for the state as well as for the country.

Based on our empirical findings we suggest the following policy prescription:

Firstly, after observing the negative influence of the improved *NSDP per capita* we can conclude that an improvement in the *NSDP per capita* helps the state to make their working-age population engaged in income-earning activities according to their capacity. With the increased NSDP when transmitted to job opportunities, the unskilled, semi-skilled and skilled labour will get opportunities to participate in the productive activity according to their capabilities and can earn income to support their livelihoods. Escalated NSDP also helps in achieving the higher opportunities for social development, suchlike more educational institutions at all levels, improved health facilities for all, proper sanitation etc. Succinctly, increased NSDP helps the concerned state to create opportunities as well as capabilities for their demographic dividend and protects the working-age population to move outside in search of better opportunities. Thus, states are recommended to take appropriate initiatives to increase their NSDP and also recommended to transmit that increase NSDP to appropriate opportunities. *Secondly*, our empirical result suggests that an increment in the *Total Gross Enrolment ratio in higher education (18-23)* increases the job-allied emigration. This reflects the biggest threat to India, '*brain drain*' (Browne, 2017). The human capital of India is moving

outside of India in search of better opportunities. Good education and better health are two main components of the formation of human capital (Paul, 1986; Lucas, 1988). This indicates India fails to motivate its human capital for serving its country by providing the right opportunities. Thus, it is highly recommended that along with improvement in the educational system the government have to take apposite steps for opening new avenues for these skilled working-age populations so these populations can contribute to economic development. *Thirdly*, following the earlier two arguments, we also recommend increasing the job opportunities for the working-age population. Consequently, the working-age population will get their desired job in India and that will decline the job-allied emigration from India to other countries. Finally, we have included one indicator, viz., '*Good Governance Index*' as a measure of the social-economic and demographic indicators. In fact, the 'Good Governance Index' can observe the overall development of any state. An improvement in the '*Good Governance Index*' means better opportunities for its young-age population and those better opportunities restrict its population from job-allied emigration. Accordingly, overall improvement of the state is always recommended.

Statements and Declarations

Conflict of interest: The authors disclose that there are nofinancial or non-financial interests, directly or indirectly related to this paper. The authors declare that they have no conflict of interest.

Research involving Human Participants and/or Animals: Not Applicable

Informed consent: Not Applicable

Ethics approval and consent to participate: Not applicable

Availability of data and material: The study is based on the secondary data and all the data sources are clearly mentioned in the text. For further details, kindly consult Table-1.

Funding: This research did not receive any specific grant from any funding agencies in the public, commercial, or not-for-profit sectors.

Authors' contributions: S.M., conceived of the study, participated in its design and coordination, performed the statistical analyses, and drafted the manuscript; A.S, helped in data compilation, participated in the design, helped to draft, and revised the manuscript. P.S, helped in drafting the manuscript. All authors read and approved the final manuscript.

Appendix

Table-A.1: Summary Statistics

Variables	Mean	SD	CV	Min.	Max.	Sum	Count
Emigration	3440.125	6596.366	191.747	0	34124	220168	64
Covid-19 cases	398213.8	866465.5	217.588	0	5497448	25485685	64
Inflation rate	5.829	1.824	31.292	2.2	10.3	373.1	64
NSDP per capita (constant)	126405.1	71631.4	56.668	30621	374055	8089927	64
Total Gross Enrolment ratio higher edu (18-23)	31.965	13.071	40.893	14.5	76	2045.8	64
Labour force participation rate (15-59)	57.996	7.196	12.408	41.4	77.6	3711.8	64
Good Governance index	4.646	0.062	1.352	3.48	5.66	297.39	64

Source: Authors' own calculation based on secondary data

Reference

Abella, M. I., & Sasikumar, S. K. (2020). Estimating Earnings Losses of Migrant Workers Due to COVID-19. *The Indian Journal of Labour Economics*, *63*(4), 921-939.

Adhikari, A., Goregaonkar, N., Narayanan, R., Panicker, N., &Ramamoorthy, N. (2020). Manufactured Maladies: lives and livelihoods of migrant workers during COVID-19 lockdown in India. *The Indian Journal of Labour Economics*, *63*(4), 969-997.

Allard, J., Jagnani, M., Neggers, Y., Pande, R., Schaner, S., & Moore, C. T. (2022). Indian Female Migrants Face Greater Barriers to Post-Covid Recovery than Males: Evidence from a Panel Study. *medRxiv*.

Altbach, P. G. (1991). Impact and adjustment: Foreign students in comparative perspective. *Higher education*, *21*(3), 305-323.

Andreß, H. J. (2017). The need for and use of panel data. *IZA World of Labor*, (352).

Andrews, M. A., Areekal, B., Rajesh, K. R., Krishnan, J., Suryakala, R., Krishnan, B., Muraly, C. P., & Santhosh, P. V. (2020). First confirmed case of COVID-19 infection in India: A case report. *The Indian journal of medical research*, *151*(5), 490–492.https://doi.org/10.4103/ijmr.IJMR_2131_20.

Awasthi, I., & Mehta, B. S. (2020).Forced Out-Migration from Hill Regions and Return Migration During the Pandemic: Evidence from Uttarakhand. *The Indian Journal of Labour Economics*, *63*(4), 1107-1124.

Balajee, A., Tomar, S., & Udupa, G. (2020). Fiscal Situation of India in the Time of COVID-19. *Available at SSRN 3571103*.

Baltagi, B. H. (2005) "Econometric Analysis of Panel Data", *John Wiley&Sons Ltd. West Sussex*, England. ISBN-13 978-0-470-01456-1.

Bhagat, R. B., Reshmi, R. S., Sahoo, H., Roy, A. K., &Govil, D. (2020). The COVID-19, migration and livelihood in India: challenges and policy issues. *Migration Letters*, *17*(5), 705-718.

Bhaumik, S. K. (2015). Principles of econometrics: A modern approach using eviews. OUP Catalogue.

Browne, E. (2017). Evidence on education as a driver for migration. *Helpdesk Report*.

Castelli, F., &Sulis, G. (2017). Migration and infectious diseases. *Clinical Microbiology and Infection*, *23*(5), 283-289.

Census of India (2011). *Census of India*, Office of Registrar General, India, Retrieved from: http://censusindia.gov.in (Accessed 12/11/2022).

Chakraborty, I., &Maity, P. (2020). COVID-19 outbreak: Migration, effects on society, global environment and prevention. *Science of the Total Environment*, *728*, 138882.

Chanda, R., & Gupta, P. (2018). Indian migration to the Gulf: Overview of trends and policy initiatives by India.

Chatterjee, K., Chatterjee, K., Kumar, A., & Shankar, S. (2020). Healthcare impact of COVID-19 epidemic in India: A stochastic mathematical model. *Medical Journal Armed Forces India*.

Chen, M., Li, M., Hao, Y., Liu, Z., Hu, L., & Wang, L. (2020). The introduction of population migration to SEIAR for COVID-19 epidemic modeling with an efficient intervention strategy. *Information Fusion*, *64*, 252-258.

CMIE, (2021). Youth unemployment in India Post Covid-19. Retrieved from: https://timesofindia.indiatimes.com/blogs/krishna-athal/youth-unemployment-in-india-post-covid-19/ (Accessed 13/11/2022).

Dhorajiwala and Narayan, (2020). Locked down in distress. Retrieved from: https://indianexpress.com/article/opinion/locked-down-in-distress-6400569/ . (Accessed 12/11/2022).

Dougherty, S., Herd, R., &Chalaux, T. (2010). What is holding back productivity growth in India?: Recent microevidence. *OECD Journal: Economic Studies*, *2009*(1), 1-22.

EPW, (2020). Impacts of COVID-19 on Labour *The costs of the pandemic disproportionately fall on labour.*

Gettleman, J., & Schultz, K. (2020).Modi orders 3-week total lockdown for all 1.3 billion Indians. *The New York Times*, *24*, 0362-433.

Gindling, T. H., & Newhouse, D. (2014).Self-employment in the developing world. *World development*, *56*, 313-331.

Haapanen, M., &Bockerman, P. (2013). Does higher education enhance migration?.

ILO, (2020).COVID-19: Protecting workers in the workplace. Retrieved from: https://www.ilo.org/global/about-the-ilo/newsroom/news/WCMS_738742/lang--en/index.htm(Accessed 17/10/2022).

ILO, (2021). ILO Monitor: COVID-19 and the world of work. Seventh edition Updated estimates and analysis. Retrieved from: https://reliefweb.int/report/world/ilo-monitor-covid-19-and-world-work-seventh-edition-enardeiditjpnlptrutrvizh?gclid=Cj0KCQiAorKfBhC0ARIsAHDzslvEr2v3e5HhRnA2Zh_zU0gi97hOqWDSTH6pHSF975ilZ5e7I2xhTu8aAsvxEALw_wcB (Accessed 12/10/2022).

Jesline, J., Romate, J., Rajkumar, E., & George, A. J. (2021). The plight of migrants during COVID-19 and the impact of circular migration in India: a systematic review. *Humanities and Social Sciences Communications*, *8*(1), 1-12.

Jha, A. (2020). COVID-19 Relief Package. *Economic and Political Weekly*, 55(17).

Jomo, K. S., & Chowdhury, A. (2020). covid-19 pandemic recession and recovery. *Development*, *63*(2), 226-237.\

Kannan, K. P., & Khan, M. I. (2022). Loss of Job, Work, and Income in the Time of COVID-19. *Economic & Political Weekly*, *57*(2), 37.

Kar, S. K., Ransing, R., Arafat, S. Y., &Menon, V. (2021). Second wave of COVID-19 pandemic in India: Barriers to effective governmental response. *EClinicalMedicine*, *36*.

Khanna, A. (2020). Impact of migration of labour force due to global COVID-19 pandemic with reference to India. *Journal of Health Management*, *22*(2), 181-191.

Koshle, H., Kaur, R., &Basista, R. (2020). Breakdown of Business and Workers in India: Impact of Corona Virus.

Kumar, N. (2012). Recent Trend and Pattern of Indian Emigration to Gulf Countries: A Diaspora Perspective. *Central University of Gujarat*.

Kumar, S. K., &Rajan, S. I. (2015). *Emigration in 21st-century India: Governance, legislation, institutions*. Routledge India.

Liao, N., & He, Y. (2018). Exploring the effects of influencing factors on energy efficiency in industrial sector using cluster analysis and panel regression model. *Energy*, 158, 782-795.

Lucas Jr, R. E. (1988). On the mechanics of economic development. *Journal of monetary economics*, *22*(1), 3-42.

Maity, S., & Sinha, A. (2018). Interstate disparity in the performance of controlling crime against women in India: Efficiency estimate across states. *International Journal of Education Economics and Development*, *9*(1), 57-79.

Mandal, S. (2015). Learning the world? Changing dimensions of adult education and lifelong learning in India. In *Global Perspectives on Adult Education and Learning Policy* (pp. 148-162). Palgrave Macmillan, London.

McKenzie, D. (2017). Poverty, inequality, and international migration: Insights from 10 years of migration and development conferences. *Revue d'économie du développement*, *25*(3), 13-28.

Menegaki, A. N. (2011). Growth and renewable energy in Europe: A random effect model with evidence for neutrality hypothesis. *Energy economics*, *33*(2), 257-263.

Mohanty, S. K (2020). Ripple Effects of Covid-19 on the World and India Sequence of Prevention Strategies. *RIS Dairy*, 16(3), 1-2.

Nabin, M. H., Chowdhury, M. T. H., & Bhattacharya, S. (2021). It matters to be in good hands: the relationship between good governance and pandemic spread inferred from cross-country COVID-19 data. *Humanities and Social Sciences Communications*, *8*(1), 1-15.

Neumayer, E. (2003). *The pattern of aid giving: The impact of good governance on development assistance*. Routledge.

NITI, (2022). NITI Aayog's Multidimensional Poverty Index (MPI). Retrieved from https://groundreport.in/these-are-the-10-poorest-states-in-india/#:~:text=Bihar%2C%20Jharkhand%20and%20Uttar%20Pradesh,Multidimensional%20Poverty%20Index%20(MPI). (Accessed 12/11/2022).

Noushad, A. P., Parida, J. K., & Raman, R. K. (2020). Low-skilled emigration, remittances and economic development in India. *Migration and Development*, 1-31.

Paul, M. (1986). Romer Increasing Returns and Long-Run Growth The Journal of Political Economy, Vol. 94, No. 5.

Pesaran, M.H. (2006) "Estimation and inference in large heterogeneous panels with a multifactor error structure", *Econometrica*, Vol. 74, No. 4, pp. 967-1012. E-ISSN1468-0262. https://doi.org/10.1111/j.1468-0262.2006.00692.x.

Rao, N., Jeyaseelan, L., Joy, A., Kumar, V. S., Thenmozhi, M., &Acharya, S. (2013). Factors associated with high-risk behaviour among migrants in the state of Maharashtra, India. *Journal of biosocial science*, *45*(5), 627-641.

Rao, S. S. (2008). India's language debates and education of linguistic minorities. *Economic and Political Weekly*, 63-69.

Ratha, D. K., De, S., Kim, E. J., Plaza, S., Seshan, G. K., &Yameogo, N. D. (2020). COVID-19 crisis through a migration lens. *Migration and development brief*, *32*.

Ricciardi, L., Chiarelli, D. D., Karatas, S., &Rulli, M. C. (2021). Water resources constraints in achieving silk production self-sufficiency in India. *Advances in Water Resources*, *154*, 103962.

Romer, P. M. (1990). Endogenous technological change. *Journal of political Economy*, *98*(5, Part 2), S71-S102.

Sarkar, P. (2020). An overview of out-migration from Uttar Pradesh using census 2011. *Journal of Migration Affairs*, *2*(2), 58-66.

Saxenian, A. (2005). From brain drain to brain circulation: Transnational communities and regional upgrading in India and China. *Studies in comparative international development*, *40*(2), 35-61.

Schiffel, D., & Blair, L. M. (1977). Employment opportunities and labor force participation. *Atlantic Economic Journal*, *5*(2), 53-60.

Singh, P., & Kumar, S. (2021). Demographic Dividend in the Age of Neoliberal Capitalism: An Analysis of Employment and Employability in India. *The Indian Journal of Labour Economics*, *64*(3), 595-619.

Singh, S., &Paliwal, M. (2015). India's Demographic Dividend. *World Affairs: The Journal of International Issues*, *19*(1), 146-157.

The Economic times, (Jan 15, 2021). At 18 million, India has the world's largest diaspora population. Retrieve from: https://economictimes.indiatimes.com/nri/migrate/at-18-million-india-has-the-worlds-largest-diaspora population/articleshow/80290768.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst. (Accessed 12/10/2022).

Times of India (May, 2021). Full list: Unlocking begins in some states, Covid curbs to remain, Retrieved from https://timesofindia.indiatimes.com/india/covid-19-which-states-are-extending-lockdown-and-which-ones-are-easing-curbs/articleshow/83109846.cms (Accessed 12/11/2022).

Tripathi, A. P., & Agrawal, N. (2022). COVID-19, Reverse Migration and Crisis Management: A Study of the Model of Government of Uttar Pradesh (India). *Indian Journal of Public Administration*, *68*(1), 84-99.

United Nation (2020).Growth of international migration slowed by 27%, or 2 million migrants, due to COVID-19, says UN. Retrieved from: https://www.un.org/en/desa/growth-international-migration-slowed-27-or-2-million-migrants-due-covid-19-says-un (Accessed 15/11/2022).

Wadhwa, R. (2016). Students on move: Understanding decision-making process and destination choice of Indian students. *Higher Education for the Future*, *3*(1), 54-75.