Covid-19 Pandemic Crisis on Labour and Employment Force in India: Impact, Approaches and Future Perspective

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ABSTRACT

The Corona pandemic and unprecedented lockdown by the central government have severely affected the labour market on various ways. It has brought uncertainties to thousands of people in India and left them in dire strait due to the complete loss of their livelihoods and regular job. Initially the major industrial developed states like Gujarat, Maharashtra, Tamil Nadu and Karnataka witnessed the higher incidence of corona positive cases, these state are considered as the major industrial hub centers in India. There is free flow of labour from indigenous sector to industrial sector, where millions of people were engaged in different sector for their livelihood especially eastern states (high surplus labour) like Jharkhand, Odisha, Bihar and West Bengal. During unprecedented lock down due to spread of corona virus, the livelihoods of the marginal people under question mark. The present study is mainly focus on the broad objective of impact of covid-19 pandemic on the labour and employment situation in India. The data set for the present study is carried out by the help of CMIE (Centre for Monitoring Indian Economy) quarterly data for January 2020 to June 2020. Besides, it also used the various published report by ILO (International Labour Organization) and mainstream newspapers for analysis. These impacts are most troubling for low-income households, which are less well positioned to cope with earnings losses during a recession, have no alternative earnings and have no social security available. Most of these workers earn little more than a subsistence wage and have no other means to protect their incomes if they lose their jobs. Migrant workers constitute quite a large proportion of such vulnerable population.

Key words: Covid-19; Pandemic crisis; Labour; Employment;

According to the CMIE report indicates that the unemployment rate has increased around 27 per cent, which considered as the record high in history of Indian labour market. There are an estimated 100 million internal migrants in India, which make up about 20 per cent of the total workforce. They contribute an estimated 10 per cent of India's economic output (*AlJazeera*, 2020). Fitch has cut GDP growth forecast for India to 2 per cent for the fiscal year ending March 2021, which would make it the slowest growth in India over the past 30 years (*Business Today*, 2020). This article discussed some of the important issues regarding the effect of epidemics like COVID-19 on the migrant

population. These impacts are most troubling for low-income households, which are less well positioned to cope with earnings losses during a recession, have no alternative earnings and have no social security available. Most of these workers earn little more than a subsistence wage and have no other means to protect their incomes if they lose their jobs. Migrant workers constitute quite a large proportion of such vulnerable population. (*Weissmann*, *J.* 2020).

Millions of migrant workers are anticipated to be left unemployed in India due to the lockdown and subsequent fear of recession. Many of the migrant workers have returned to their villages, and many more are just waiting for the lockdown to be lifted. The risk is particularly higher for those who are working in unorganized sectors, and those who do not have writer contracts, or those whose contracts are at the verge of completion. The lockdown and the subsequent recession are likely to first hit contract workers across many of the industries.

The world has faced the crisis of corona pandemic, where the millions of people are out of employment or lay-offs, reduction in working hours and wages too, which directly effects on the livelihoods and survival of the people in general and socio-economically marginal communities in particular. According to the ILO report indicates that working hours and employment erode around 6.7 per cent in the second quarter of 2020, which is equivalent to that of 195 million full-time workers. The loss of regular employment and unemployment situation due to the impact of covid-19 pandemic is considered as the worst phase since World War-II. It is a great challenge for lower and middle-income countries like India. Even, as per the recent CMIE report the salaried person has been also worst affected due to covid-19 induced lockdown. The data highlighted that total number of salaried person is around 86.1 million in 2019-20. This fell to 68.4 million during April, 2020. By July, the number of salaried job had fallen further to around 67.2 million. It means around 5 million salaried persons in India lost their job and nearly 18.9 million salaried persons were lost their job since the lockdown. Due to a wide and sudden spread of COVID-19, the world economy faces the threat of a serious recession. The outbreak of the disease led to more than 200,000 people fleeing the city, making it one of the largest postindependence migrations in the country (Leo, 2020). The Organization for Economic Cooperation and Development (OECD) forecasted that in a best case scenario, its fallout would slash global growth by half a per cent age point (Lowrey, 2020). Similarly, bodies such as the International Monetary Fund (IMF), the World Bank and the Secretary- General of United Nations also predicted global recession and significant economic crisis in many countries (Business Today, 2020).

The COVID-19 pandemic has pushed the world into an unprecedented crisis and uncertainty, calling to expedite the implementation of the Centenary Declaration. It called upon constituents to pursue 'with unrelenting vigour its [ILO] constitutional mandate for

social justice by further developing its human centred approach to the future of work'. It called for putting workers' rights and the needs, aspirations and rights of all people at the heart of economic, social and environmental policies. The international community and ILO's constituents have engaged in a collective endeavour to tackle the devastating human impact of the pandemic, but more is needed (*Walter, 2020*).

According to the Indian government's 2016-17 Economic Survey, internal migrants make up about 20 per cent of the workforce. And they contribute an estimated 10 per cent of India's economic output, according to the UN Educational, Scientific and Cultural Organization. But, without formal work contracts, they are vulnerable to exploitation and abuse. Many earn little more than a subsistence wage and have no social security to protect their incomes if they lose their jobs. A growing number of aid agencies that help to support internal migrants fear the government's response to the corona virus - which since March 24 has involved the closure of businesses and other public spaces - may lead to a humanitarian and economic disaster far larger than the medical emergency the measures are meant to control. (Al-Jazeera, 2020)

Globalization provides the macro context for new anxieties over massive epidemics. The dramatic increase in the magnitude, velocity, and diversity of international movements paradoxically ensures more pandemics while making the spread of any given pathogen much harder to predict. Approximately 1 billion people traveled across international borders in 2015, up from 500 million in the early 1990s. And the rapid growth of air travel hubs such as Singapore and Dubai, along with developments in international trade and tourism, has led to increasingly complex patterns of international travel. After episodes of diseases such as SARS in 2003, H1N1 influenza (swine flu) in 2009, and now Zika, it is evident that new disease threats can originate in far-off places, proliferate rapidly, and have global impact in a matter of days (Carter, 2016).

During the pandemic, both men and women are affected differently; mostly migrants, causal worker, hawkers, rickshaw pullers, and lottery sellers are more vulnerable. It has been witnesses the rural area is more vulnerable than the urban, the crisis of joblessness in the rural area is acute due to the reverse migration. The labour market is not adequately creating the demand

for the job due to the nationwide lockdown, while the supply-side also constrains with inadequate labour supply as labour migrants left for home due to prolong lockdown. As result, both formal and informal economy has collapsed. The state machinery is inadequately addressed the crisis and failed to reach poor and marginalized people. The impact of a pandemic on labour market has the exclusion of livelihood and income of marginalized section of people. Economic distress leads to multiple vulnerable such as illness, suicide, death and domestic violence. As per the ILO report further warned that India including Brazil and Nigeria having the vast majority of the workforce engaged in the informal or unorganized sectors. State and center have to take preventive measures for wage worker and casual worker to protect wage and incentive to them. According to the Retailer Association of India (Nahata, 2020), about 40 million people in the informal sector and 6 million people in the formal sector are employed by the retail sector alone. Even in the formal sector, about 3–4 million people are employed on a contractual basis. Hence, in the case of COVID-19 situation also, a large number of migrant workers are at immediate risk of losing their current job, temporarily or permanently. The risk is particularly higher for those who are working in the unorganized sector, and those who do not have writer contracts or those whose contracts are on the verge of completion. The lockdowns and subsequent recession are likely to first hit contract workers across many of these industries.

The present study is mainly focused on the broad objective of the impact of covid-19 pandemic on the labour and employment situation in India. The data set for the present study is carried out with the help of CMIE quarterly data for January 2020 to June 2020. Also, it used the various published report by ILO and mainstream newspapers for analysis. According to Ginsburg et al., (2018) Many low- and middle-income countries are facing a double burden of disease with persisting high levels of infectious disease, and an increasing prevalence of non-communicable disease (NCD). Within these settings, complex processes and transitions concerning health and population are underway, altering population dynamics and patterns of disease. Understanding the mechanisms through which changing socioeconomic and environmental contexts may influence health is central to developing appropriate public health policy. Migration, which involves a change in environment and health exposure, is one such mechanism.

METHODOLOGY

Pre-COVID-19 labour and workforce participation in India: In the process of development of the Indian economy, the important and crucial part is the utilization of human capital. Human capital is one of the important factors for shaping the Indian economy in a better way; this is in the form of labour and their participation in the workforce. To comprehend the effects of COVID-19 on labour and workforce participation in India, we need to understand the situation before the pandemic. According to PLFS 2018-19 data reveals that around 54.9 per cent of the rural male and 18.2 per cent of the fame, while 57 per cent urban males and 15.9 per cent of the urban females in the labour force participation. It means the before pandemic, there was not sharp decline of employment. On other side women agricultural labour were low in labour efficiency (Shanthy, 2009).

In India, employment, unemployment, and labor force participation rate seemed to be 34.94, 13.62 per cent, and 42.80 per cent, respectively (CMIE, 2020). Whereas, during 2019 was found to be 39.62 per cent, 7.38 per cent, and 40.98 per cent. There is a declining trend in the mentioned parameters. The inception of covid-19 made the consumer market towards a declining rate. The lockdown prevailed for prolonged periods, obstructed the flow of financial parameters among the different societies. The marketability scenario went towards declining phases which made a severe effect on industrial sector. A recent study by Mehrotra & Parida (2019) estimated that around 115.3 million people are engaged in industrial employment, of which the manufacturing sector employment accounts for 56.4 million, while the remaining 58.9 million are in nonmanufacturing employment Mehrotra & Parida (2019).

RESULTS AND DISCUSSION

Employment and unemployment and labour participants rate for January-June month: The impact of COVID-19 has been uneven for different regions, different sectors and different populations. The majority of employers operate businesses in the hardest-hit sectors of manufacturing, accommodation and food services, wholesale, retail trade, real estate and business

activities. Restrictions on movement have had a direct impact on trade, and especially on retail trade, and it may persist with lowered demand. Manufacturing had already experienced a slowdown due to a decline in both domestic demand and exports. The impact of lockdown on construction was direct and immediate as construction largely ceased.

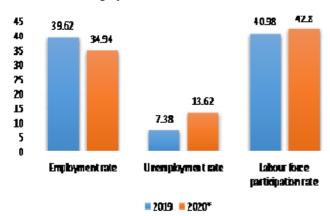


Figure 1. Employment and unemployment and labour participants rate for January-June month

Source: Centre for Monitoring Indian Economy, 2019 & 2020

According to CMIE Report, employment rate of January, February and March month was found to be in steady-state with 39.80, 39.29 and 38.24 per cent, respectively which means there is no much changes in initial lockdown whereas during April and May it was decreasing trend with 27.21 and 29.19 per cent, respectively resembles a strong impact of COVID 19 pandemic this nearly reveals when the number of active cases of COVID 19 increases, there is the decrease in the employment rate. In June month, the employment rate seems to be 35.90 per cent.



Figure 2. Employment rate in India during period of January, 2020 to June, 2020

Source: Centre for Monitoring Indian Economy, 2019 & 2020

In case of the unemployment rate, January (7.22%), February (7.76%) and March (8.75%) was

slightly steady rate whereas during April (23.52%) and May (23.48%) it was increasing at decreasing rate conveys number of COVID-19 cases increases; there is an increase in the unemployment rate. According to ILO report reveals that about 400 million Indians including migrants, casual workers are at high risk of being pushed deeper into the poverty trap since there is no wage work and income for a large portion of workers especially in the informal economy. The unplanned and unprecedented lockdown by the central government pushed the people through widespread job cuts in formal sector, loss of daily income by the poor migrants and casual workers. Unemployment rate for June month seems to be 10.99 per cent. The unemployment situation during the covid-19 pandemic has multiplied vulnerable in both urban and rural areas. As per the study by Ajim Premji Foundation indicates that the non-agriculture sector has more job than the agriculture sector, especially casual workers and self-employed person are the worstoff. In addition, it also finds the social category-wise employment and unemployment among the SCs, STs and religious minorities. The SCs and STs and religious minorities around 81 per cent have loss employment than Hindus 65 per cent.



Figure 3. Unemployment rate during period January, 2020 to June 2020

Source: Centre for Monitoring Indian Economy, 2019 & 2020

Labour force participation rate shows decreasing trends from January to May since a per cent age of employed and unemployed person population was decreased and increased, respectively. Migration of labour was considered to be one of the prime factors for the decline in Labour force participation rate. In the view of labour migration during COVID-19 infections in India, which might elevate new policies or the elasticity of existing ones that will negatively affect the country's farming as well as agri-business systems, With these

issues there were some triggered questions paved some vision over covid-19: (i) What will be future remunerative mechanism for the livelihood for Indian farmers? (ii) Will it be sustainable for long term perspectives? (iii) Will the alternate or the contingent plan work for the needful to cope up this crisis? (iv) What will be the policy measures to the problems for labor migration? These issues remain to be addressed properly. Hence, it seems evident that new and more sustainable policy measures and blueprints are required that are considered in the diversified social setup in India. Another study on the impact of a recession in Kerala (Zachariah & Rajan, 2010) indicated that more than one-fifth of the emigrants returned home because they lost their jobs due to the financial crisis, while another 3.3 per cent came because they were compulsorily repatriated. Another 11.5 per cent of the emigrants reported that they returned home because their contract had expired and was not renewed. Adding up all, the total per cent age of emigrants who returned home owing to the economic recession was around 36 per cent (about 63,000 emigrants) in the state of Kerala. Parganiha et al., 2016 stated that agricultural labourers area migrating to different parts of the country for earning their livelihood and there is in-equilibrium between demand and supply.

Region-wise crisis of employment, unemployment and labour force participation in India: Figure 5 indicates the region-wise employment and labour force participation rate in India during the COVID-19

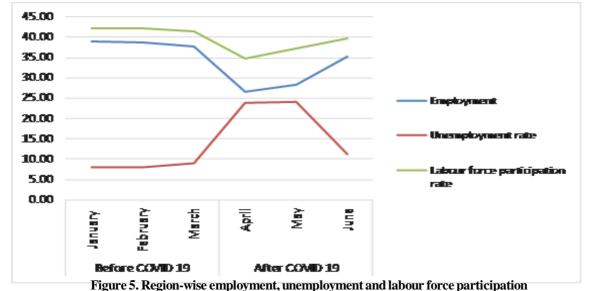


Figure 4. Labour force participation rate during the period of January, 2020 to June 2020

Source: Centre for Monitoring Indian Economy, 2019 & 2020

pandemic. It seems there is variation in both rural and urban areas,

The wave of a COVID-19 pandemic continues to dominate in the Indian economies; the rate of positive cases has increased nationwide since the unprecedented lockdown. The protective measure has taken by the central government to restrict people to their homes as well as to stop the unwanted spread of the novel corona virus, such restriction of particular people is not economically feasible in the process of development i.e. women (see figure-6). Women are the more vulnerable section of society subject to social and economically. India's gender gap is very widening, while the country was already performing poorly on the UN Gender Inequality Index before the COVID-19 pandemic (ranking 122 out of 162). Growing unemployment among



during the period of January, 2020 to June 2020 (Source: Centre for Monitoring Indian Economy, 2019 & 2020)

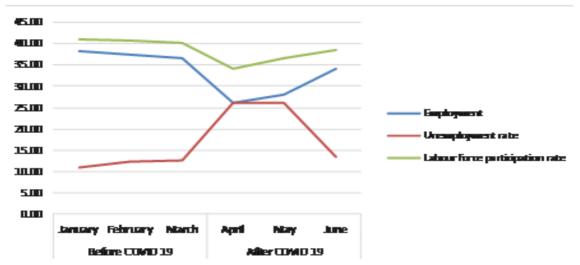


Figure 6. Gender-wise employment, unemployment and labour force participation during the period of January, 2020 to June 2020 (Source: Centre for Monitoring Indian Economy, 2019 & 2020)

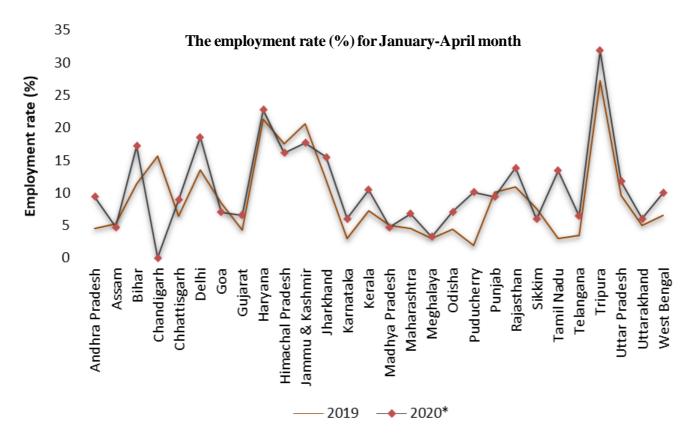
the female has the considerable burden on the unpaid domestic work. Therefore, the current pandemic has disproportionately effect on women who live differently. The covid-19 has had a huge impact on the regular employment of women; it is found that official statistics do not capture women's work adequately or accurately during the lockdown. As per the recent survey by Azim Premji University 5000 workers across the 12 states, the report reveals that about 52 per cent women worker were worse off than men during the lockdown. It also found that in rural area around 71 per cent women lost their job due to lockdown mostly in a casual worker, lottery sellers, garbage collectors and domestic helpers. It also evidences from the CMIE report that job losses in April 2020, as compared to April 2019 were higher for rural women than men. The rural-urban migration could displace women employed in the agriculture sector, as men return to take over. It has been found that more rural women than men have lost their jobs due to the covid-19 pandemic and women's livelihoods have often been worse hit. The Confederation of Indian Industry (CII) indicated that more than half of the tourism and hospitality industry can go sick with a possible loss of the large number of jobs if a recovery in the industry stretches beyond October 2020 (Das, 2020).

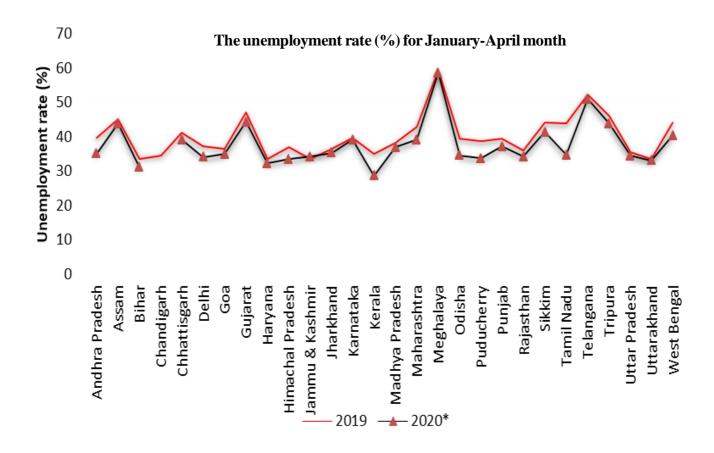
According to the World Economic Forum's Global Gender Gap report indicates that India ranks at 149 out of 153 countries when it comes to economic participation and economic opportunity. The unemployment situation among the female is worrisome, where it can be considered as the root cause of all economic distress. It

is also noticed that more rural women were lost their job than men due to COVID-19 induced lockdown. They could be considered as key aspects to the building of economic revival. The question of women's livelihood is often the worst affected in rural areas. The ILO has estimated that up to 25 million people might become unemployed worldwide due to the impact of COVID-19, ranging between 5.3 million job losses on a 'low scenario' and 24.7 million on a 'high scenario' (ILO, 2020). The impact may differ from country to country. During the peak of the COVID-19 in Wuhan, almost 5 million people in China lost their jobs in January and February 2020 (Cheng, 2020). A survey from the Angus Reid Institute found that 44 per cent of Canadian households have experienced some type of job loss (Macleans, 2020). Nearly 900,000 workers lost their jobs in Spain since it went into lockdown in mid-March 2020 (Keeley, 2020). In March 2020, more than 10 million Americans lost their jobs and applied for government aid (Weissmann, J. 2020). The Federal Reserve Bank of St. Louis estimated that the coronavirus outbreak could cost 47 million jobs in the USA and the unemployment rate may hit 32 per cent (Davidson, 2020).

Gender-wise employment, unemployment and labour force participation:

State-level scenario: The active status in the employment rate was observed in followed states *viz.*, Meghalaya with the rate of 58.58 per cent is mainly due to proportion of marginal workers were found to be high compared to other states (source: Meghalaya state





development report, 2008) followed by Telangana (50.90), Gujarat (44.22), Tripura (43.70), Assam (43.78) and slow-down phase observed in Uttarakhand (33.01), Haryana (32.23), Bihar (31.03) and Jammu and Kashmir (34.21).

The number of unemployed divided by the total labor force, which will be the unemployment rate with higher in Tripura (31.85), Haryana (22.77), Delhi (18.56), Jammu, and Kashmir (17.65) and Bihar (17.21). The decreasing unemployment rate was apparent in Meghalaya (3.26), Assam (4.27), Madhya Pradesh (4.74), Sikkim (6.00) and Uttarakhand (6.02) in the year 2020 (January-April month). These impacts are most troubling for low-income households, which are less well-positioned to cope with earnings losses during a recession, have no alternative earnings and have no social security available (*Papademetriou et al.*, 2010).

The States like Tripura, Meghalaya, Telangana, Gujarat, and Assam has the highest labor force participation rate with 64.13, 60.55, 54.43, 47.31, and 45.94 per cent, respectively. Whereas, states like Kerala, Uttarakhand, Odisha, Puducherry, and goa hunts the lowest labor force participation rate. The rate is far higher than last year is due to the recent shock of lockdown which is similar to Evaluating different scenarios of inverse labor migration, Singh et al. (2020) estimates the loss in total system productivity in between 9% and 21%. India took action early to limit the spread of COVID-19, ordering a 21-day nationwide lockdown for its population of 1.3 billion people starting on March 24, 2020. The lockdown has since been prolonged several times. As a result of these initiatives, it is only recently that the pandemic has spread widely in India compared to other countries. Generally, an economic crisis in the destination reduces the number of migrants, reduces remittances, and disrupts migrant systems (Curran et al., 2016).

Strategies to deal with the impact and New Road Map: The on-going economic crisis due to prolong lockdown, where both demand and supply-side aspects has disrupted. While demand has plunged, supply chains have been constrained across the globe as well as within countries too. The reasons behind the all essential commodity were disrupted and small and marginal farmers are unable to get their basic dues. All the perishable goods like vegetable, milk and milk-based

product were rotten and also pour on the road due to lack of proper cold storage in the rural areas. The middlemen were also lost their job. To tackle such gigantic issues, the government of India has announced the economic relief measure to various sectors of the economy. The farmers, as well as the small and marginal trader, get benefits of financial assistance through different institutions the SIDIB, NABARD and MSME sectors. The government providing collateral-free loan to small and medium scale industries. In the agricultural sector through PM-Kisan Samman, small and marginal farmers get financial assistance every year.

Every country in the world has struggled to draw specific plans and policies in terms of economic and social aspects for the betterment of the informal labor force especially in migrants and socio-economically backward sections. In India, MGNREGA program is a classic example of a safety net for the rural poor. During the covid-19 pandemic, the central government INR 40.000 crore financial packages for MGNREA program. To strengthen the rural employment opportunities for stranded migrants and rural poor.

The PMGKY (Prime Minister Garib Kalyan Yojana) is another notable initiative by the central government to the poor and marginal sections of people in the rural areas. 30 million senior citizens, widows, disabled to get one-time ex-gratia amount of INR 1,000 in two installments over the next 3 months. 200 million-woman Jan Dhan account holders to be given ex-gratia amount of INR 500 per month for the next 3 months, to run the affairs of their household. Women in 83 million families below the poverty line covered under Ujjwala scheme will get free LPG cylinders for the next 3 months.

The Government of India announced a variety of measures to tackle the situation, from food security i.e. PMGKAY (Prime Minister Garib Kalyan Anna Yojana) is considered as world's largest food security programme in India, it ensures sufficient food for the poor and needy during the covid-19 pandemic crisis. The food needs to be provided to all the beneficiaries under public distribution system (TPDS) for Antyodaya Anna Yojana (AAY) and priority household (PHH) ration cardholders. The eligible beneficiaries will get 5 Kg of food grains and 1 Kg Gram per month for three months between April and June, 2020. This time has now been extended to five more months, till the end of November 2020.

CONCLUSION

As an immediate support measure during the lockdown, the Indian Government had initiated a package of US\$25 billion, around 0.8% of the GDP. The Reserve Bank of India has taken measures to release liquidity of about US\$18 billion into the banking system. In addition, an economic stimulus package as part of the Atmanirbhar Abhiyan (Self-Reliance Mission), amounting to INR 20 trillion (around 10% of the GDP), was announced. It aimed to benefit migrant workers, rural workers, small businesses and street vendors affected by the economic slowdown. Covid-19 has brought many changes in our routine from abandoning handshakes to maintaining social distancing with the effective practice of proper hygiene mechanisms, mask and sanitizers on daily basis. Apart from personal hygiene, many enterprises, particularly those in IT services, education, entertainment and even administration, have gone very substantially on-line with working from home. As manufacturing factories reopen, the standard operating procedure should be followed as per the government guidelines which further enhance the automation of robustness of the production process. Many value chains have been re-organized in the constrained spaces. Workers in the unorganized sector have also re-fashioned ways of functioning and utilizing digital spaces. There could be a substantial reduction, if not collapse, of some sectors like tourism and international travel. Changes in global interdependence are also likely, with a reduction or restructuring of international trade and global value chains. The share of health care in GDP should increase. Forms of work and its organization could take new forms. The labour and employment ministry is looking to extend the scheme and allow workers to avail unemployment insurance if they are impacted by a coronavirus (Jha, 2020). However, these measures are not sufficient considering the intensity of the crisis. Much more can be done by the government to protect its people and economy. ILO guided select states, notably Odisha and Uttar Pradesh, to develop responses for supporting the enterprises and workers, especially in the informal economy weaker section of the worker's group. A brief note on Short-term Policy Response to COVID 19 was shared with state governments. Recovery efforts from this pandemic need to be derived from the process of social dialogue and should be rooted within internationally accepted Labour standards, developed with the consensus of ILO tripartite constituents. We can only move with the principle of 'build back better' if our efforts are based on the notion of social justice and solidarity.

REFERENCES

Al-Jazeera (2020). Hungry, desperate: India virus controls trap its migrant workers. Al-Jazeera. Time.

Business Today (2020). Coronavirus impact: Fitch cuts India's GDP growth outlook to 30-year low of 2% for FY21.

Carter, E. D. (2016). When outbreaks go global: Migration and public health in a time of Zika. Migration Information Source.

Cheng, H. Y.; Jian, S. W.; Liu, D. P.; Ng, T. C.; Huang, W. T. and Lin, H. H. (2020). Contact tracing assessment of COVID-19 transmission dynamics in Taiwan and risk at different exposure periods before and after symptom onset. *JAMA Intl. Medicine*, **180** (9), 1156-1163.

CMIE (2020): Unemployment rate in India. Centre for Monitoring Indian Economy, https://unemploymentinindia.cmie.com

Curran, S. R.; Meijer-Irons, J. and Garip, F. (2016). Economic shock and migration: Differential economics effects, migrant responses, and migrant cumulative causation in Thailand. *Sociology of Devel.*, **2**(2): 119-157.

Das, G. (2020). 136 Million jobs at risk in post-corona India. Livemint. https://www.livemint.com/news/india/136-million-jobs-at-risk-in-post-corona-india-11585584169192.html

Davidson, P. (2020). Unemployment could top 32% as 47M workers are laid off amid corona virus: St. Louis Fed. USA Today.

Ginsburg, C.; Bocquier, P.; Béguy, D.; Afolabi, S.; Kahn, K.; Obor, D. and Collinson, M. A. (2018). Association between internal migration and epidemic dynamics: an analysis of cause-specific mortality in Kenya and South Africa using health and demographic surveillance data. *BMC Public Health*, **18**(1), 1-14.

ILO (2020). COVID-19 and the world of work: impact and policy responses. Downloaded at

https://www.ilo.org/wcmsp5/groups/public/—dgreports/—

dcomm/documents/briefingnote/wcms_738753.pdf

Jha, S. (2020). India to offer unemployment benefits to workers affected by coronavirus. Business Standard.

- Keeley, G. (2020). Spain sees historic rise in unemployment as nearly 900,000 lose jobs since coronavirus lockdown. The Independent.
- Leo, L. (2020). How Surat fought an epidemic 26 years ago. https://www.livemint.com/news/india/how-surat-fought-an-epidemic-26-years-ago-11580229286908.html
- Lowrey, A. (2020). The corona virus recession will be unusually difficult to fight: Consequences will linger even after the virus dissipates. The Atlantic. https://www.theatlantic.com/ideas/archive/2020/03/viral-recession/607657/
- Macleans (2020). COVID-19: Canada layoff tracker. Macleans.ca. https://www.macleans.ca/economy/covid-19-canada-layoff-tracker/
- Mehrotra, S., & Parida, J. K. (2019). India's employment crisis: rising education levels and falling non-agricultural job growth.
- Nahata, P. (2020). Corona virus impact: Fear of contract job losses prompt cash transfer calls. Bloomberg Quint. https://www.bloombergquint.com/business/fear-of-contract-job-losses-prompt-cash-transfer-calls
- Papademetriou, D. G; Sumption, M.; Terrazas, A.; Burkert, C.; Loyal, S. and Ferrero-Turrión, R. (2010). Migration and immigrants two years after the financial collapse: Where do we stand? Migration Policy Institute.
- Parganiha, O.; Sharma, M. L.; Paraye, P. M. and Soni, V. K. (2016). Migration effect of agricultural labourers on agricultural activities. *Indian Res. J. of Ext. Edu.*, **9**(3), 95-98.
- PLFS, (2018)., Annual Report, Government of India. http://mospi.nic.in/sites/default/files/publication_reports/Annual_Report_PLFS_2018_19_HL.pdf
- Shanthy, T. Rajula (2009). Efficiency of women agricultural labourers in rice farming systems of Kerala and Tamil Nadu. *Indian Res. J. of Ext. Edu.*, **9**(2), 96-99.
- Singh, Balwinder; et al. (2020). Agricultural labor, COVID-19, and potential implications for food security and air quality in the breadbasket of India. Agric. Syst. 185 (102954), 2020. https://doi.org/10.1016/j. agsy.2020.102954.
- Walter, D. (2020). Implications of Covid-19 for Labour and Employment in India. *Ind. J. Labour Eco.* 63, 47–51 (2020). https://doi.org/10.1007/s41027-020-00255-0
- Weissmann, J. (2020). 6.6 Million Americans filed for unemployment last week. Slate. https://slate.com/ business/2020/04/unemployment-jobs-numbers-economy-coronavirus.html
- Zachariah, K.C. and Rajan, S.I. (2010). Impact of the global recession on migration and remittances in Kerala: New evidences from the return migration survey (RMS) 2009.

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