



# THE INDIAN SOCIETY OF LABOUR ECONOMICS LABOUR ECONOMICS CONFERENCE

11-13 April 2022 | IIT Roorkee

## Summaries of Conference Papers

### Conference Themes

- ◆ The Employment Challenge
- ◆ Migration and Development
- ◆ Social Protection for Workers

*Organised by*



**Department of Humanities and Social Sciences**  
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C/o Institute for Human Development

256, 2nd Floor, Okhla Industrial Estate, Phase III,

New Delhi-110020, India

Phone: 011-41064679; Mobile: +91- 9871177540

Email: [ijle.isle@gmail.com](mailto:ijle.isle@gmail.com); Website: [www.isleijle.org](http://www.isleijle.org)

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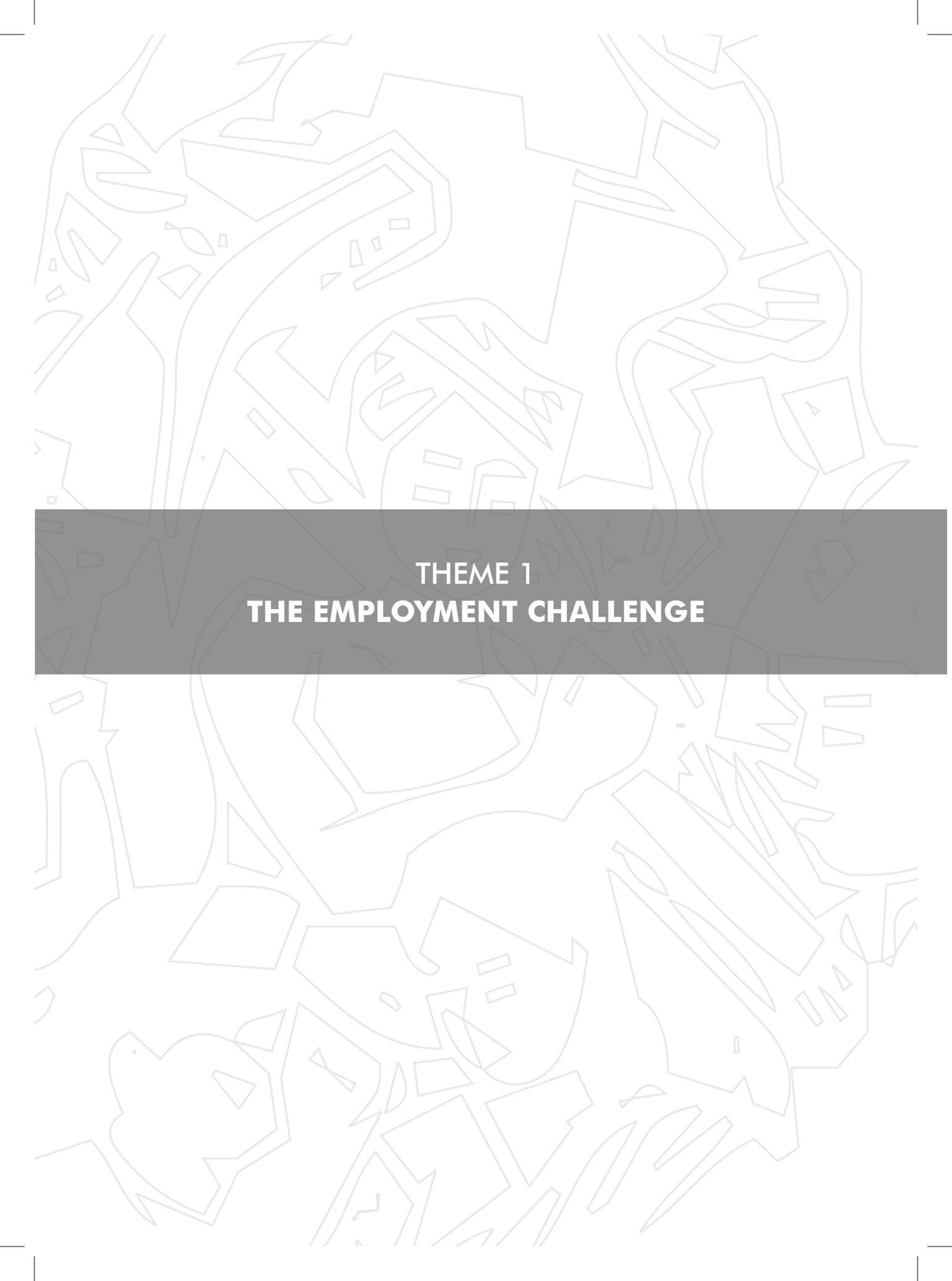
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**THEME 1**  
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## KEYNOTE PAPER

### **Structural Transformation and Employment Generation in India: Past Performance and the Way Forward**

**Amit Basole**, Associate Professor of Economics and Head, Centre for Sustainable Employment,  
Azim Premji University, Bengaluru

Historical experience suggests that a sustained rise in per capita incomes and improvement in employment conditions is not attainable without a structural transformation that moves surplus labour from agriculture and other informal economic activities to higher productivity activities in the non-farm economy. In this paper I analyse India's performance from a cross-country comparative perspective, estimating the growth semi-elasticity of structural change. I show that the performance in pulling workers out of agriculture is as expected given its growth rates, but the same is not true for pulling workers out of the informal sector as a whole. Surprisingly, India's share of service sector employment is less than predicted given its level of GDP while its share of manufacturing employment is as predicted. The puzzle is explained by the construction share of employment, in which India is an outlier. Using a cross-country panel regression I estimate the effectiveness of growth in moving workers away from agricultural and informal activities as compared to other developing countries at similar levels of per capita income. I offer a simple conceptual model to explain the process of delayed structural transformation and conclude by presenting a possible framework for a national employment policy that addresses both supply and demand side problems in the labour market.



## **TECHNICAL SESSION 1.1**

### **On the Rationale for including Employment Objectives within Development Planning**

**Duncan Campbell**, Labour and Development Economics Consultant, ILO Director, (Retired),  
Divonne-les-Bains, State, France

**Philippe Egger**, Labour and Development Economist Consultant, ILO Director, (Retired), France

At the request of the ILO, and with funding from the Swedish International Development Agency, the authors were requested to undertake an empirical review of national development plans (NDPs) with respect to their treatment of employment as an explicit development objective. A sample of 13 countries' plans, drawing on the developmental regions of the Americas, Asia, and Africa, was selected. A principal criterion for selection was the participation of ILO in the NDP's preparation. Our method included the preparation of a standardised textual analysis aiming to identify the "centrality" that employment is given in the NDP and the different ways in which that centrality is made manifest. We followed up our textual analyses through interviews with the ILO technical experts directly involved in the plans' preparation.

There are two issues that motivate this inquiry. For one, development policy and employment policy are often segregated policy spheres in national policy planning, housed in different ministries with discrete priorities, objectives and budgets. Moreover, the policy objective in each case is the derived outcome of more intermediate interventions. Development is promoted, for example, through investments in social and physical infrastructure. Employment, meanwhile, is the desired outcome of economic growth, of a supportive climate for investment, or of product market – or other – regulations.

The second motivation for this inquiry involves the consideration of the extent to which the ILO can be considered a development agency. While the Organisation's tripartite structure endows it with a firm, "real-world" purchase on, arguably, the human endeavour that matters most – the opportunity to pursue a freely chosen livelihood under conditions of economic gain, dignity, and fairness, achieving these aims lies not within the Organisation's principal spheres of influence. Labour ministries do not create jobs. The jobs that employers create, or conditions under which the self-employed can flourish, rely importantly on macro-economic policies on which the ILO has little voice, nor for which it is particularly well-organised or to which has sufficient competence to contribute in an authoritative manner.

How, then, might the ILO place productive employment more centrally as a development objective?

Our premise is, first of all, that the foregoing question is both timely, and worthy of discussion for the self-evident reasons of the ongoing pandemic and radical change in the technological basis of production and earnings. The paper argues that the centrality of employment to development is beyond question if one accepts three premises upon which such a conclusion must inescapably be drawn. The

first is that, however essential, economic growth does not necessarily lead to an improvement in the living standards of the great majority of the population. The second is that the central objective of development is the improvement of the well-being of people – of their freedom, of their capabilities, in the language of Sen. The third is that the primary means through which improvement in well-being occurs is productive and adequately remunerated employment. Development occurs through productive employment: opportunities for productive employment are an outcome of development.

This is the economic rationale for the employment dimension's featuring prominently in development plans. And to view the centrality of employment in purely economic terms is, of course, rather reductive. Employment is unique because of its relevance to so many of the dimensions of human welfare and well-being. Employment is the vehicle through which identity and status are acquired and affirmed, and a means of social integration.

The employed are more likely to be engaged in civic participation, a major socio-political objective of development, and a non-economic rationale for employment's playing a central role in development planning. Planning is directed not to people at large but to citizens of a state whose development is measured by as many social, cultural, and political ambitions as economic ones. Many of the development plans under review devote ample space to measures bolstering language and culture - Saudi Arabia, Mongolia and Paraguay are examples – and national pride, as when Egypt's plan evokes the country's ancient history, along with productive employment.

Our review of NDPs finds that employment is most centrally embedded when the plan is, first, anchored in a good analysis of the recent past, an analysis that includes an in-depth understanding of the labour market and an explanation of its performance. It is, for example, not enough to know the labour force participation rate of women, or the share of informal employment in the economy, without knowing the reasons behind these numbers. A development plan as an economic growth plan acquires greater focus when it is also, and explicitly, a plan for employment growth. Credible employment targets derived from growth targets provide a useful metric against which to measure progress. A growth plan that is also an employment plan raises to the level of policy planning the particular pattern of economic growth most likely to serve the employment objective. Any development plan, irrespective of its consideration of jobs, is already an employment plan in a de facto way.

The paper concludes with some implications of this analysis for how the ILO might position itself if employment is to be considered a, if not the principal objective of development. Some readers will appreciate that this is not the first time the ILO has considered this issue: the present conjuncture is one favourable for a reconsideration.

## **What Awaits Indian Labour Market: An Enquiry into Future of Work and Sustainability**

**Bino Paul**, School of Management and Labour Studies, Tata Institute of Social Sciences, Mumbai

Future of work and Sustainability are two critical dimensions accounting for a significant aspect of the Dynamic of the Indian Labour Market (ILM). In terms of data, the structure of ILM is not far from being a stagnant pattern. However, there is a pressing need for a piercing discussion on future scenarios. It calls for a more meaningful engagement with the microdata and relevant content to understand the dynamics of occupations, economic activity, technology, environment, and socio-economic factors. We use an unorthodox research design to understand the likely future of jobs in India, particularly in the emerging contexts of new disruptive technologies and impending effects of climate change. This paper not just relies on structured microdata such as periodic labour force, it also looks into a diverse pool of published contents for an engaging analysis of the future. Fundamentally, the paper moves around technologies and climate change to unravel the future of ILM. The article envisages a new vision for scholarship on labour markets.

## **Employment Growth and Industrial Policy: The Challenge for Indian States**

**Jayan Jose Thomas**, Professor of Economics, Indian Institute of Technology, Delhi

The nature and the magnitude of the employment challenge vary across Indian States. Some States, notably Kerala and Tamil Nadu in the south, have achieved commendable social progress, but the modernisation of their economies has not kept pace with the job aspirations of the educated young in these regions. With ageing population structures, some of these States also face labour shortages, and they are increasingly dependent on short-term migrants from the rest of the country, especially for manual and less-skilled jobs. At the other end, the growing size of the working age populations in the northern and eastern States, especially Uttar Pradesh and Bihar, offers them a huge demographic dividend for future growth. Nevertheless, the slow growth of employment opportunities, particularly after 2011-12, is a matter of great concern. At the root of the employment crisis in India have been the stagnation in the growth of rural construction jobs and the absolute decline in the size of the manufacturing workforce (between 2011-12 and 2017-18). With growing enrolment in educational institutions across the country, the demand for decent jobs will only grow louder in the coming years. Consider, for instance, Bihar, where the size of the student population (40.0 million) was significantly bigger than the size of the workforce (28.2 million) in 2017-18.

States such as Kerala and Tamil Nadu need to urgently shift to an economic structure that prioritises high skilled and knowledge-based industries. The potential for growth based on labour-

intensive industries that pay only low wages is rather slim in these States. States such as Uttar Pradesh and Bihar have the advantage that they can base their future growth on labour-intensive industries as much as on skill- and capital-intensive industries. At the same time, they have an uphill task in upgrading the education and skill levels of the workforce.

India faces severe challenges in pursuing an independent industrial policy, especially at the level of the States, and this is going to be a hurdle for employment creation. Indian States have limited financial autonomy as they depend on the financial resources devolved to them from the Central government. In fact, the ranking of Indian States based on the 'ease of doing business reforms' is fuelling indiscriminate competition among States, rather than helping them to pursue distinctive industrial growth paths. This has resulted in a 'race to the bottom', with States trying to outdo each other by offering tax incentives and relaxing regulations on labour and environment. Indian States need to take a few lessons from the way the East Asian countries have forged economic partnerships among themselves, acknowledging their relative strengths and enhancing their collective might in global manufacturing.

### **Creation and Destruction of Jobs in Urban Labour Market – Role of Gender, Caste and Religion in India**

**Panchanan Das**, Professor of Economics, University of Calcutta, Kolkata

Firms create jobs in expanding their activities and destroy jobs in dwindling production activities or adopting new sophisticated technology to continue their production activities. In response to firms' such kind of activities workers get jobs or move away from job to joblessness. Sometimes, workers move from one job to other jobs in hopes of better opportunities. While education is assumed to be the most important factor influencing the process of transitions in the labour market, the circumstance variables like gender, caste and religion are expected to have significant effects on it in a country like India. This study analyses the nature of labour market transitions through which workers move from job to jobless or one job to other jobs in urban India by using rotational panel data constructed from Periodic Labour Force Survey (PLFS) 2017-18, 2018-19 and 2019-20. PLFS is the first official household survey in India with a rotational panel structure in urban areas with a new panel starting every quarter and being visited for four successive quarters. It provides quarterly estimates of key labour market indicators in the urban economy on the basis of the CWS approach. Our analysis is restricted for working age people with two age cohorts 15 to 29 years and 30 to 65 years in the urban sector. Labour market transition is measured by the movements into and out of employment. The explanatory factors include person and household specific characteristics. The binary response model is used to find out how productivity related factors like education and other factors which are beyond individual's control like gender, caste and religion influence labour market transitions in urban areas. The results show marked differences in the nature of labour market transitions by age cohorts and a significant impact of the circumstance variables on transition probabilities. The probability of job losses for female is more than for male among the youth.

## **TECHNICAL SESSION 1.2**

### **(S)he Said What? Comparing Self and Proxy Reported Employment Status**

**Rosa Abraham**, Azim Premji University, Bengaluru, Karnataka

**Nishat Anjum**, Jawaharlal Nehru University, New Delhi

**Rahul Lahoti**, (UNU-WIDER), New Delhi

**Hema Swaminathan**, Indian Institute of Management, Bangalore, Karnataka

Women's workforce participation has remained stubbornly low in India over the past few decades. There are several reasons cited for this persistence - lack of good jobs, social norms, mobility restrictions among others. Improper measurement of women's economic activities has also been identified as an important reason for low estimates of women's workforce participation.

The measurement literature argues that (i) the boundaries of work as conceptualised in labour statistics exclude many productive economic activities largely performed by women, (ii) the framing of the work question fails to capture marginal and multiple activities that women engage in, and (iii) the respondent may not present a true picture of women's work owing to asymmetric information, cognitive biases and misinterpretation of the question. While (i) and (ii) have received some attention in the Indian context, the role of the respondent is relatively under-examined.

We focus on the respondent's identity and if they are reporting for themselves (self-report) or if they are reporting for others (proxy report). We further explore how self and proxy reporting impacts the measure of workforce participation and the kind of work they are engaged in. Our sample is primarily rural and the experiment is designed so that the proxy respondent is always the spouse. We work with the India Working Survey 2019 (IWS) conducted in Karnataka and Rajasthan to examine how respondent identity affects labour estimates.

We find significant under-reporting of women's work when reported by men. Female employment rate declines by nearly 6 percentage points when men report on behalf of women, compared to what women report about themselves. A fixed-effects estimation confirms these differences remain even after controlling for individual-specific attributes. Women between the ages of 30 to 50, from either the richest or poorest quintile, with lower education are most likely to be under-reported. We further disaggregate overall employment into self-employment, contributing family work, and casual wage work. Notably, women's participation in self-employment is likely to be over-reported by their husbands, while wage and contributing family work is under-reported. By comparing correlates of proxy reporting for each kind of work, we hypothesise potential mechanisms for this under-reporting.

## **Harnessing Demographic Dividend before it is Lost Forever in India**

**Jajati Keshari Parida**, Assistant Professor, Department of Economic Studies, Central University of Punjab, Bathinda, Punjab

**S. Madheswaran**, Professor, Centre for Economic Studies and Policy, Institute for Social and Economic Change (ISEC), V.K.R.V.Rao Avenue, Nagarbhavi, Bangalore

The main objective of this paper is to examine the pattern of youth unemployment, and to identify the sectors in which educated youth could be accommodated in order to reduce the extent of rising youth unemployment in India. Based on EUS and PLFS data it is noted that Indian economy is passing through a critical phase of economic development. While about 4.5 million people are leaving agriculture every year, the non-farm sectors job is not growing adequately to accommodate them, and those educated youth joining the labour force. This is resulted an upsurge in educated youth unemployment and the size of discouraged labour force (youth completed education and training but still neither in jobs nor searching jobs actively). Since, the growth of youth population (age 15 to 29 years) already started declining with a corresponding rise in the share and growth of elderly population, unless necessary measures are taken at the earliest, Indian economy is going to lose its demographic dividend forever and it would become an ageing society without sufficient economic prosperity. Therefore, an integrated approach of development through a structured industrial policy, along with infrastructure development, emigration and remittances policies are necessary to overcome the current labour market crisis in India.

## **Private Investment in Education and Linkage to Future Employment in India: Will the Pandemic take its toll?**

**Jeemol Unni**, Professor of Economics at Amrut Mody School of Management, Ahmedabad University, Ahmedabad

Pandemic and online learning have added to barriers to education. Lack of digital access, difficulty in communication with teachers and lack of peer support create major hurdles in learning for a large proportion of the student population. New entry barriers to better jobs, level and quality of higher education, will add to existing social barriers of gender, caste and nepotism. This will perpetuate a vicious cycle of low education and low incomes. In this paper we investigate whether there is a threshold of level of education for better jobs in India? We find that higher secondary education is a threshold required for entry into good jobs. We observe increasing returns to private investments in higher levels of education and higher returns to education in the formal sector jobs compared to the informal sector. Will deficits in education during the pandemic reduce investments in education? We study these issues mainly using secondary data from the National Sample Office (NSO). The purpose of this short paper is to build research hypotheses regarding the relation between investment in education and employment, which we highlight in the conclusion.

## Crafts and Jobs: Internalising Inclusive Innovation

**Keshab Das**, Gujarat Institute of Development Research, Ahmedabad, Gujarat

The volatility and low levels of growth of the farm sector during the post-Independence decades, strangely, did not prompt policies to build up a competitive and labour-intensive non-farm sector which was largely represented by the ubiquitous craft sector – handlooms and handicrafts. The relegation of the crafts including artisan enterprises, rated as the largest source of employment following agriculture, has remained a sordid episode in employment and enterprise planning in both rural and urban India. While an estimated about 7 million people are engaged in this sector crafts have been declining, languishing or even decimated exposing both an apathetic and myopic policy. Apart from the serious lapses in official statistics on the sector, little has been pursued to improve backward and forward linkages to access wider and higher echelons of markets without which enterprises cannot progress. A standard policy intervention has been providing for limited (often working capital related) bank credit and creating common facility centres (mainly for small firm clusters) which are accessed by a miniscule of formal/registered units. Practically little attention has been paid to creating an innovative ethos, diversification of products, organising key raw materials (as through input banks) and product promotion. These efforts would involve an approach of internalising inclusive innovation wherein the producer (crafts-persons and artisans) occupy centre stage in a participative framework of engaging with various aspects of business development, cluster-specific and generic infrastructure that would, inter alia, facilitate building up new skills to enhance labour productivity. In times of jobless and job loss growth of the Indian economy, the crafts sector requires discrete institutional innovations beyond announcing run-of-the-mill schemes. This paper engages with the craft sector with the dual perspective of business development (including by identifying demand-side drivers) and creation of sustainable jobs through an ecosystem of inclusive innovation where skill formation (for the craft and conducting business) and selective technological upgradation would be attained without wasting financial and intellectual resources (as often happens in regular schemes). Job creation in small traditional/rural enterprises issues have to be approached beyond analysing employment data (which is in disarray, anyway) per se. Internalising inclusive innovation, keeping employment generation as the central concern, in the policy domain offers a significant potential which were discussed at length during the late 1970s to mid-1990s by scholars, scientists and the civil society activists. There have been several experiments in similar direction from the developing and emerging economies as well. This paper engages with these aspects critiquing and contributing to policy discourse on rendering the crafts sector an important source of local income and employment.

### **TECHNICAL SESSION 1.3**

## **Persistent Vulnerabilities in the World of Work and Contemporary Capitalism: Some Reflections on India**

**Praveen Jha**, Professor of Economics at the Centre for Economic Studies, Jawaharlal Nehru University, New Delhi

**Preksha Mishra**, PhD Scholar, Jawaharlal Nehru University, New Delhi

It hardly needs emphasis that generating and ensuring access to employment is an essential component of any decent development paradigm; of course, this pertains to both quantity and quality. However, the gradual ascendancy of neo-liberalism since 1970s, and its rise to global dominance particularly in the past four decades, has resulted in profound implications for the world of work and workers' well-being across the globe. While there have been substantial increases in wealth and labour productivity across the globe during this period, it has also been accompanied by uneven development plagued with low labour absorption. The fundamental changes stemming from the structural transformations, within the contemporary neoliberal capitalism, have immensely exacerbated the inequities and vulnerabilities in the world of work. Deepening informality representative of high precariousness, lack of decent work, low wages, social security, and high level of 'vulnerable employment' (as defined by ILO) have adversely affected the working population, particularly in the global south; India being no exception. As of 2019, prior to the novel Coronavirus pandemic that led to breakdown of economic activities, the global unemployment rates were already high and stood at 5.4% despite decent rates of growth of GDP. Even among those employed, the share of vulnerable employment was as high as 43.9%. Coupled with high wage inequalities and lack of coverage and adequacy of social security, it has resulted in persistent challenges for the workers. Of the total global population, about 53.1% were not covered by any social protection benefits (World Social Protection Report 2020–22).

Viewed through the lens of Marxian political economy, these labour market outcomes represent persistence of 'labour reserves' (or to use Marx's preferred expression 'Relative surplus population'). While different analytical frameworks treat 'labour reserves' differently, the Marxian model visualises them, in sharp contrast to either the mainstream or heterodox models, as a permanent and intrinsic feature of competitive capitalism. The mainstream models can hardly explain the persistence of unemployment or under-employment in a well-functioning market system; a whole gamut of heterodox models view 'surplus labour' as only transitory in nature. Within Marxian political economy, existence of 'labour reserves' as a perennial feature and its continuous exacerbation are inevitable outcomes of spontaneous capitalism driven by the powerful inherent tendencies of incessant accumulation. Under contemporary capitalism, high economic growth has been accompanied by low labour absorption represented in the under- and un-utilisation of labour at a global level particularly in the global south. The global composite unemployment & time-related underemployment rate and the potential labour force rate (as defined by ILO), which stood at a high figure of 10.1% and 3.3% respectively in 2019, point towards this phenomenon.

A jobless/job-loss growth poses a huge challenge everywhere in the world; India is no exception. The rate of growth of GDP in India for the past four decades, before the pandemic, has been significant by any standard, averaging around 6% per annum. However, the past three decades have also been marked by a secular decline in employment elasticity of output, which even turned negative between 2011-12 and 2017-18 representing precipitously low absorption rates and consequent high unemployment rates during the reform period. Against this backdrop, the paper primarily delves into the current employment and unemployment challenges in India while focusing on select aspects of inequities and vulnerabilities. While engaging with theoretical conceptualizations, although very briefly, and the analytical framework of long-term structural vulnerabilities under the neo-liberal regime, the paper offers a snapshot of persistent challenges in India's world of work at the current juncture using the ILO conceptualisation of vulnerable employment, and also in terms of some other indicators related to decent employment. Issues pertaining to caste and gender dimensions have also been explored briefly in this regard. With respect to inequities in the world of work, the paper examines some of the key variables, such as— participation rates, wages etc, along occupational and social groups axes.

### **Hundred Years from 'Ten Days that Shook the World' The Employment Challenge in India: Hundred Years from 'Ten Days that Shook the World'**

**Rajarshi Majumder**, Professor of Economics University of Burdwan, Golapbag, Burdwan,  
West Bengal

The Paris Commune and the Bolshevik Revolution, taking place roughly 150 and 100 years ago respectively, were significant for the world of work. Concerns about availability of work, working conditions, wages and remunerations, and workers' rights were recognised and put on record as concerns of the State. It is also about hundred years of the formation of the ILO and its articles on Hours of Work, Minimum Wage, Unemployment, Maternity Protection & Night Work for women, and Work for Young people. Long struggle over the previous century had brought about this consensus and over the next 50 years these revolutionary changes and humane working conditions were converted to statutory provisions around the globe including post-independence India. However, hundred years from then, workers around the world are facing new challenges which are reminiscent of the times a century back. Creation of jobs is sluggish at the best and absent at the worst, remuneration from jobs have been almost stagnant, working hours and working conditions are becoming longer and harsher, technology is threatening to render a large swathe of workers redundant, and there is a growing disjoint between work and wealth. Against this backdrop, we attempt in this paper to flag the challenges that India is facing in the world of work. We observe that there are five main challenges facing Indian labour market at present – (a) absolute lack of employment opportunities; (b) chronic unemployment and intermittent employment; (c) substantial underemployment and loss of person days; (d) low returns from work; and (e) skill mismatch.

There is an absolute decline in workers over the last decade, most of that being rural casual labourers. Work intensity in terms of weekly hours worked has gone up while chronic unemployment has also increased. Returns from work are low and unequal across work type, occupation, gender and sector. There is a growing mismatch between the skills demanded by the growth contributing sectors and the skill profile of the labour force. In addition, there is a mismatch between sectoral shares in GVA and sectoral shares in employment, as a result of which wages/remuneration are vastly different across sectors, aggravating inequality. Regional analysis suggests that rather than growth and business environment, government capital expenditure on development has positive impact on job creation.

According to us the present trends are the natural sequel to the economic boom built on mass casualisation of the workforce over the previous two decades. While the growing economy led to induction of casual labourers, at first sight of slowdown, the axe fell on these unskilled casual workers. With production increasing becoming technology-driven and capital intensive, skill mismatch and skill inequality will only aggravate in the coming days. It is high time to have a separate Employment-Income Policy rather than continuing with the false hope that economic growth will solve the employment conundrum.

### **Suitable Labour – Social Identities and Employment in India**

**Sumangala Damodaran**, Professor, School of Development Studies, Ambedkar University, Delhi

Employment and labour market practices in India have been characterised by a combination of the need to ensure a balance between reliable and reasonably stable supplies of labour on the one hand and the avoidance of the conversion of this into a regime of claims and rights by labour. This is ensured through a wide variety in informalisation processes that draw heavily from the principles of social identity-based employment. The extent and importance of social identities such as caste, religion and gender in employment practices in India have been studied and theorised extensively, demonstrating that the possibilities provided by the functioning of such social identities are exploited to sustain employment practices that might appear to have ‘risen above’ the norms of such identities or employment. In other words, apart from clearly caste based or religion based occupational distribution of the workforce, there is a recasting or reconstitution of the norms of such employment in many sectors of the economy. This includes not only historically ‘socially embedded’ sectors but also those where employment ostensibly would need to have nothing particularly to do with social practices. This paper argues that ‘suitability’ is a trope that is used for employment, with both positive and negative connotations that derive from social identities. Through examples from sectors that are both traditionally social identity based and those that are not, it demonstrates how processes of informalisation utilise mechanisms and value systems that stem from specific social hierarchies to keep labour costs low in the Indian economy. While stigma and socially enforced degradation through low caste and minority group status explain how this gets translated into a regime of poor outcomes, I argue that even ‘dignity’ provided by superior social status is utilised effectively to keep labour costs low, but ‘social compensation’ for it in terms of dignity serves to mask the economic degradation

that it results in, in many circumstances. In other words, the mechanisms that result in pervasive informalisation consist of employing notions of suitability, permissions, prohibitions and stigma that are inherent to social structures of caste, gender, religion and ethnicity.

## The Wage Productivity Decoupling in India

**Vinoj Abraham**, Centre for Development Studies, Thiruvananthapuram, Kerala

Notwithstanding the robust growth in value added per worker, the wage growth had been dismal during the period 2011-12 to 2018-19. During the period 2011-12 to 2018-19 the labour productivity growth was 5.9 percent per annum while the average wage growth was negative -0.5 percent per annum, implying an absolute decline in real wages during a period of robust productivity growth. Theoretical predictions argue a strong association between productivity growth and wage growth. Such a divergence in productivity growth and wage growth in the economy is of grave concern. It implies that the workers would be receiving a smaller share of the value added as wages, while a larger share of such value addition would be distributed as non-wage components.

Analyzing the factors that influenced wage growth during the period 2011-12 to 2018-19 the sectoral GSDP growth did not have any scale effect on the wage growth while labour productivity growth had weak effects on the wage growth. Comparing between regular and casual wage growth models, it can be seen that as the wage gap between regular wage workers and casual wage workers widens the demand for casual wage workers increases while that of regular wage workers declines. Conversely as the wage gap declines, it is the growth of wages of regular workers that increases in comparison to the casual wage workers. This indicates that the segmented nature of the labour market is probably diluting. The increasing share of the relatively lesser waged workers, female workers, seems to reduce the overall wage growth of regular workers.

As can be evidenced from the above analysis, there is no supporting evidence to claim that the patterns in wage growth in India currently is reflective of the labour productivity trends in the aggregate. If any, available evidence suggests that the observed productivity-wage gap in the organised sector is now becoming a pan-Indian phenomenon. During the dynamic growing phase of the Indian economy, during 1990s to early 2010s the widening gap between productivity and wages implied unequal distribution of the value added. However, in the stagnant economy phase since the mid 2010s this would imply that wage would be further driven down. In such an economic condition, employers may resort to cost cutting methods to maintain profits, such as feminizing the workforce, regularising the workforce at low fixed costs components. The wage growth may also respond to structural features such as rising unemployment in the economy, which in turn is partially due to the changing demographic features such as the youth bulge, but also due to the poor growth performance of the economy.

## **TECHNICAL SESSION 1.4**

### **Population Adjustment to Asymmetric Labour Market Shocks in India – Estimates based on the State and District Levels**

**Patrick Puhani**, Full Professor, Leibniz Universität Hannover, Hannover, Germany

**Franziska Braschke**, Ph.D. student, Leibniz Universität Hannover, Germany

Internal migration can be an important component for adjusting asymmetric regional labour market shocks. For a fast-developing economy like India, which is also experiencing rapid population growth, efficient internal migration of labour may be even more important. Still, in such a large country such as India which contains different language groups, internal migration may also face political and administrative barriers.

In this paper, we use Indian EUS-NSSO data on 32 states/union territories and 570 districts for a bi-annual panel with 5 waves to estimate how regional population reacts to asymmetric shocks. In particular, we use rounds 60 (collected from January 2004 to June 2004), 62 (collected from July 2005 to June 2006), 64 (collected from July 2007 to June 2008), 66 (collected from July 2009 to June 2010), and 68 (latest available, collected from July 2011 to June 2012). Because round 60 was only collected during 6 instead of 12 months, we check the sensitivity of our results with respect to exclusion or inclusion of round 60. Round 61 is excluded because our estimating equation contains a lag structure and we want to maintain a two-year lag throughout the sample. We exclude the following small union territories: Andaman and Nicobar Islands, Lakshadweep (both islands), and Pondicherry (set of geographically disconnected territories). Because of changes to districts and inconsistencies in the data, Delhi and Goa are treated as a single entity in the district data. The following districts are excluded due to lack of wage information: Lakhisarai (Bihar), Upper Siang (Arunachal Pradesh), and Tamenglong (Manipur). We also excluded Leh Ladakh, Kargil, and Punch (all Jammu and Kashmir), because data for these districts is only available in round 68 (collected from July 2011 to June 2012) of the EUS survey.

Asymmetric labour market shocks are measured by non-employment rates, unemployment rates, and wages in fixed-effects regressions which effectively use changes in these indicators over time within regions as identifying information. Using sampling weights, we build regional-level data (at the state/union territory or district level) for the population growth factor, the non-employment rate (1 minus the employment-population ratio), and the unemployment rate. In doing that, we only consider people of working age (15-64 and 15-50, respectively). We also generate—using sampling weights—the average wage per region as a proxy for earnings potential. As we do not have information on hours of work, we only use full-time workers who usually work at least 5 days per week full-time. Because we include region and time effects, we interpret regression-adjusted population changes as proxies for regional migration.

We find that Indian workers react to asymmetric regional shocks by adjusting up to a third of a regional non-employment shock through migration within two years. This is higher than the quarter found in a previous paper for the United States and the European Union, albeit for a one-year lag period. We also find a significant population response to regional wage differentials: a one percent increase in the wage of a region increases the population growth factor by approximately 0.45 percent. Although Indian workers seem to be mobile in reaction to asymmetric regional labour market shocks, our finding is not inconsistent with concerns raised in the literature on barriers to mobility: maybe the dynamics of the Indian economy requires much more labour mobility for India to unleash its economic potential.

### **Tanneries in Kanpur and Pollution in the Ganges: A Theoretical Analysis**

**Amit Batabyal**, Arthur J. Gosnell Professor of Economics, Rochester Institute of Technology,  
Rochester, New York

We focus on pollution in the Ganges caused by the tannery industry in Kanpur. In this regard, the work of Khwaja et al. (2001), Gowd et al. (2010), and Bhatnagar et al. (2013) clearly tells us that many of the pollutants---such as chromium---that are deposited into the Ganges by the tanneries are extremely injurious to human health and hence the problem of regulating the deposition of these pollutants is a serious matter. Despite the seriousness of the underlying problem, to the best of our knowledge, there are no theoretical studies in either economics or regional science that have rigorously analysed the control of pollution in the Ganges caused by the tannery industry in Kanpur. Given this lacuna in the literature, we provide what we believe is the first analysis of pollution in the Ganges arising from the activities of the tannery industry in Kanpur.

The remainder of this paper is organised as follows: Section 2 describes our model of pollution in the Ganges caused by the tanneries in Kanpur. Specifically, there are two tanneries, and that are located on the same bank of the Ganges in Kanpur. Both produce leather and the production of leather requires the use of chemicals that are toxic to humans. Tannery is located upstream from tannery Tannery leather production depends directly only on labour use but tannery leather production depends on labour use, the chemical waste generated by tannery and the natural pollution absorbing capacity of the Ganges. Section 3 determines the equilibrium production of leather by both tanneries in the benchmark case in which there is no pollution. Section 4 ascertains how the benchmark equilibrium is altered when tannery accounts for the external diseconomy imposed on it by tannery. Section 5 analyses what happens to leather production and to labour use when the two tanneries merge and then comments on some policy implications stemming from this paper's research. Section 6 concludes and then suggests two ways in which the research delineated in this paper might be extended.

## **Agrarian Change, Technology Adoption and Agricultural Labour Use Pattern in Rajasthan**

**Yogesh Murariya**, Assistant Professor, Dr. Bhimrao Ambedkar College, University of Delhi, Delhi

**Deepak K Mishra**, Professor, Centre for the Study of Regional Development, School of Social Sciences, Jawaharlal Nehru University, New Delhi

Employment in agriculture continues to be important in the Indian context. However, the processes of agrarian change, and the extent of labour absorption in agriculture, are regionally diverse. Rajasthan is among the state that has seen a moderately high agricultural growth and where 65 percent of the population is still dependent upon agriculture. There has been a great deal of out-migration from rural areas of Rajasthan, particularly to the construction sector. The implications of all these for farm-level labour absorption remains an under-investigated question. Till now, the spread of Green Revolution technology remains uneven in Rajasthan. The present study discusses the farm level determinants of technology adoption along with the relationship between farm size and average human labour use per acre when different kinds of technologies are adopted to the farm households. The study is mainly based on primary data collected from 360 farmer households in six villages of Rajasthan, along with secondary data sources. A logit model was used as this model quantifies the probabilities of significant factors influencing the decision to adopt a particular technology. Farmers' adoption decision of improved technology is largely affected by assured irrigation facilities. By providing the proper irrigation facilities along with other improved technologies, agricultural growth can be increased manifold, making agriculture itself profitable and attractive for farmers and judicious and productive use of agricultural labour. Interestingly, the dependency of small and marginal farmers on family labour is found to be significant, especially when irrigation is available. The findings of the study also show that the farm households who used the tractor required, on an average, less labour as compared to those who didn't use tractors for farm operations. Thus, the patterns of agrarian change and its implications for labour-use point to the diverse challenges faced by different categories of farmers.

## **Employment Challenge in Non-Farm Sector of India**

**Anupama**, Professor, Department of Economics, Punjabi University, Patiala, Punjab

The present paper looks at the employment challenges faced by India, especially in its non-farm sector. India faces a challenge of creating adequate job opportunities not only for the new entrants of the labour market but also of creating productive and decent jobs for those trapped in low productivity sectors. Recent three Periodic Labour Force Surveys (PLFS), point out a very important thing regarding the change in structure of Indian labour market that cannot be ignored. The share of agriculture sector in total employment is not only still very high but has also increased recently, leading to a fall in the non-farm employment. It shows the inability of the manufacturing and service sectors to absorb the surplus workforce released by the agriculture in the past time period. Outside agriculture, the sectors which showed the rise in employment recently are trade, hotels and restaurants. Agriculture and trade, hotels and restaurants together accounted for 97.5 percent of the total increase in the workforce between 2018–19 and 2019–20. This shift is further accompanied by fall in proportion of the workers with job

contract, paid leave and any type of social security. Of the total increase of 43 million in the workforce between 2018–19 and 2019–20, 37.8 million were informal workers. Another important feature of the non-farm labour market is that this sector is dominated by small sized/dwarf unregistered units, a big majority of them are being run by the working owners alone without any hired labour. While the share of the self-employed in the total workforce has increased by about 1.5 percentage points, this share has increased at a sharper rate in case of the non-farm units. This has led to a marginal fall in regular and casual workers but a rise in share of unpaid family workers, especially the females. Over half of the increase in the female workforce was as unpaid family helpers, which pushed the objective of gender balances in the workforce even farther. This change in distribution of workers by nature of employment is also accompanied by fall in real wages of both the regular and casual workers as well as the self-employed earnings. As the non-farm sector is dominated by unregistered tiny units, which are characterized by informal work arrangements, no regulation, low productivity and absence of social protection, we can say that the current structure of the labour market in the non-farm sector is moving towards greater precarity of work. Hence, recognising these challenges and putting in place appropriate policy responses to tackle them is of utmost priority. In this perspective, using the PLFS data, present paper is an attempt to take stock of the employment conditions currently prevailing in the non-farm sector of India. It also charts a possible policy path forward to address both short-term and long-term challenges of livelihood and employment. The focus is primarily on the non-farm economy, so the agrarian sector is not dealt with. We will explore the sub-sectors and their inherent characteristics which contributed to a fall or improvement in the quality of jobs in the non-farm sector so that an appropriate policy can be suggested to attain the goal of providing full and productive employment and decent work to everyone.

### **Technology, TFPG and Employment: A Panel Data Analysis**

**Sameer Malik and Arup Mitra**, Institute of Economic Growth, Delhi

This paper based on the United Nations Industrial Development Organisation (UNIDO) panel data set makes an attempt to estimate total factor productivity growth across countries. Productivity convergence over time is evident when countries are divided across regions which could be attributed to a greater degree of association of countries in a given region pursuing joint efforts for infrastructural development, ICT coverage and advancement, trade negotiations, technology acquisition and innovation, and inflow of FDI. In terms of efficiency estimates for select years most of the countries are seen to be operating much below the frontier. This is indicative of the fact that countries are keen to pursue resource-driven growth in an attempt to maximise it. Based on the inter-temporal data we observed that a number of countries registered either a negative or a positive but low correlation between labour productivity growth and TFPG. Evidently, countries are engaged in greater mechanisation which may be raising labour productivity without ushering in much success in terms of TFPG. From panel data regression the impact of technology perceived in terms of TFPG, on employment is seen to be negligible though it is important to note that none of the groups, income or region wise, recorded a statistically significant negative effect except the LDCs, while the significant cases (howsoever scanty) reveal a positive association. Appropriate incentives may motivate firms to experience technological progress and employment growth both.

## **TECHNICAL SESSION 1.5**

### **Patriarchal Discrimination and Capitalist Relations: The Gender Question in the Gig Economy**

**Govind Kelkar**, Visiting Professor, Council for Social Development, Delhi

The gig economy consists of freelance and short-term jobs or gigs in which platforms (organizations) set up contractual arrangements with independent workers on a non-permanent basis. In recent years, the scale and scope of gig work, including digital platforms, have grown in India. Some predictions of about the future of the gig economy indicate in the next 8 to 10 years gig economy has the potential to service up to 90 million jobs in India's non-farm sector, with more than USD 250 billion in volume of work. According to ILO study of 2021, India is the largest supplier of workers on the digital platforms, with 20percent of the total share in the developing economies. However, women workers' engagement on web-based platforms shows grim picture, with only 20percent while it is 31percent in Ukraine and 41percent in United States (ILO, 2021). This paper explores the question: has the increased flexibility of production systems and delivery services of gig work changed the cultural phenomenon that effects gender relations and social value systems, or has it contributed to the continued gender hierarchies undermining women's work and contributions in production spaces, as it currently exists in offline firms, factories, and households?

What is important to understand in this political economy of gig economy has the capability deficit of workers caught into the intersection of technology, gender norms and the concealed power of the market, which not only create and run the platforms, but also facilitate gender disparity in payments, establish monopoly mechanisms and surveillance of workers, including driver routing and so on. In the seemingly projection of digitally driven progressive gig economy, women workers confront a hidden narrative of economically conservative rules and the capitalist employment relationships ridden with precarity, more like the informal sector work with marginal security, safety, and regularity of benefits. This gender precarity of gig economy is not new; it has existed even in the formal and informal work noted for gender-based discrimination, supervisory abuse of workers and caste hierarchies. However, conditions of precarity have deepened and have become much wider with short-term and uncertainty of employment sometimes lasting only 20-25 minutes is the nature of gig work. This precarity of gig work became more serious with stringent lockdown measures of Indian economy, affecting food industry, tourism, aviation, retail and education.

The recent 'Time Use in India 2019 (TUS)' report released by The National Statistical Office indicates disproportionate differences in household work between women and men in burden of unpaid activities: "The women spent around 5 hours a day on unpaid work while men spent just 1.6 hours" (Sridharan, 2021:59). The TUS study also showed that education of men did not make any difference towards sharing of unpaid domestic work or in a gendered system of control of women to regulate themselves for domesticity and to carry out all the domestic work as their duty. Interestingly,

the World Values Surveys Wave 6 (2012) showed that close to one-third of India's women agreed to the statement "if a woman earns more money than her husband, it is almost certain to cause problems". These data show that patriarchy defines both the realities of women's domestic inequality and men's dominant role and higher valuation of their work. With no better options women tend to be complicit in this male-centered hierarchal system and internalize undervaluation of their own work and socio-political position.

Some reports indicate that women gig workers thrive upon the flexibility in working conditions, allowing them to work 'where they want to work and how they want to work (BCG, 2020). That this flexibility is especially suitable for women workers, in the sense that they can combine their domestic/care work and the gig work. These reports tend to ignore how most women gig workers grapple with the anxiety to earn to meet their livelihood needs and how they continuously negotiate with their 'duties' of care responsibilities in the given cultural norms and inadequate safety and security in working conditions. The gendered working of the gig work points out:

- Women tend to be concentrated in low-paid services such as on-demand domestic work, beauty care, and other multiple gig works.
- Work from home in low-paid sectors do not accord any control or negotiating power with the employers or with state actors. An increase in women's agency or empowerment requires collective action, which in turn, creates opportunities to increase socio-political power, influence cultural norms and increase power to claim rights to productive resources. However, in the given structure of individualised gig work, such a collective action has been missing.
- Research shows that platforms in India do not have adequate grievance mechanisms for women gig workers.

Conventional economic theory has largely failed to measure and capture the value created by women's unpaid care work. It became a subject of concern with feminist economist interventions towards the end of the 1990s. Generally, trapped in the market-centric logic of work and existing under the state-led economic dependency on men—as well as under the influence of gendered social norms—women feel limited in bargaining with household heads and others, "who consume the products of their labor" (Folbre, 2020).

A 2020 study by Tandem Research suggests five areas for improvement in the condition of women gig workers. I have added a sixth area to these conditions for improvement for women engaged in the gig work.

- Upgrading labour laws and instituting social protection for gig workers.
- Need to extend protection against workplace harassment to gig workers.
- Strengthen bargaining power of women gig workers and support their collectivization to demand better rights.
- Redress sexual harassment and data surveillance.
- Track gender-related and intersectional data on women gig workers.
- Agency Development of women engaged in the gig work:

Women's concern about low wages, unfair conditions of work and disproportionate burden of household and unpaid care work as well as marginal presence in decision making and in unions point to the lack of bargaining power. In this context some recent research (Rathi and Tandon, 2021) reported that women's domestic workers organizations asked for the interventions of platforms to help achieve recognition and open bank accounts, which could then possibly used to receive the payment of work and thus increase their access to credit. However, these are not being done and leads us to reflect on Andre Lorde's (1984) famous warning for a patriarchy organized culture of the gig economy, "The master's tools will never dismantle the master's house".

What is needed is a shift from the precarious conditions of women's low-wage employment in the gig economy and changes in social norms that constrain women's professional mobility and their ownership and control over finances and productive assets. Any defense of social traditions has little appeal to those women (and men) who have suffered from the negative aspects of such traditions. To diversify and reshape the economy in recovery from the economic chaos caused by Covid-19, the state and the market agencies must ensure that women have financial independence, parity-based in remuneration and decision making that fosters gender equality.

### **Tracking Structural Transformation in the Indian Labour Market Amidst COVID 19: An Application of Transition Matrix and Event Study Analysis**

**Aakash Dev**, PhD Scholar, Shiv Nadar University, Greater Noida, Uttar Pradesh

**Partha Chatterjee**, Professor and Head, Economics Department, Shiv Nadar University, Greater Noida, Uttar Pradesh

The COVID-19 pandemic is having unequal labour market impacts. Research has highlighted the various economic consequences of the pandemic seen in terms of job losses and concomitant unprecedented rise in unemployment across economies (Global Economic Prospects June 2021, World Bank). India is no exception. Government of India resorted to one of the world's most stringent lockdown to minimise the loss of lives and livelihoods with onslaught of the pandemic. The economic fall-out on employment paradigm has been enormous (Dhingra & Machin., 2020; Bertrand et al., 2020; Deshpande., 2020; Lee et al., 2020; Abraham et al., 2020). However, none of the papers have looked at the structural changes, if any in context of the Indian labour market. Our paper investigates the structural transformation in India seen through labour flow chart and the corresponding transition matrix for the share of fulltime employment vis-à-vis non fulltime employment. As per our understanding, labour flow chart has not been prepared for India till now. Examining the fast frequency longitudinal panel data from Centre for Monitoring Indian Economy (CMIE) – Consumer Pyramids (CPHS) on Type of Employment and Education, this paper also examines the effect of the pandemic induced lockdown on the likelihood of a worker under full employment seen as a function of their skill set proxied by the highest standard of education attained by them. We find an overall similar labour flow trend for men and women studied individually. The sharp fall in the supply of workers at different level of skill set shown in the absolute number trend charts during the restriction waves supports the rise in the

share of missing workers as captured by the Data Not Available category in the labour flow charts. We stick to CPHS waves to prepare the labour flow chart and the transition matrix corresponding to the period January 2019 to August 2021 (latest data available), to comment on the structural transformation for Pre COVID CPHS Waves (16, 17 & 18), During Restrictions CPHS Waves (19, 20) and Post Relaxations CPHS Waves (20, 21 & 22). Following 21<sup>st</sup> CPHS wave onwards, with phased relaxations announced by the Government, there is a gradual recovery in the transition flow movement approaching the pre pandemic scenario. The event study analysis computes the changes in the average likelihood coefficients during the same period. Throughout the analysis, male workers enjoy a higher likelihood of being employed under fulltime employment compared to female workers. The likelihood of fulltime employment shows a secular rise with rise in the education level of the workforce. We do not observe any significant change in the likelihood coefficients with the onslaught of pandemic examined with state level fixed effects till the latest wave compiled. However, it would be too myopic for us to conclude on the structural changes in the labour market at present. As the pandemic is not over yet and recovery process is still on, the trend flow chart is highly volatile and subsequent waves would help us better understand the dynamics of the labour market structure.

### **Gender Differences in Returns to Self-employment in India**

**Mohd. Imran Khan**, Sarla Anil Modi School of Economics, Narsee Monjee, Institute of Management Studies, Mumbai, Maharashtra

**Pallavi Wats**, Indian Institute of Management, Ahmedabad, Gujarat

**Jannet Jacob Farida**, Independent Researcher, Trivandrum, Kerala

This paper provides estimates of returns to education by nature of employment by gender from 1993-94 to 2017-18, and also separates out returns from vocational and general education in India. The paper addresses the sample selectivity issue arising due to endogenous choice of employment status in a Mincerian wage earnings equation using the multinomial-selection approach. The study found positive and incremental marginal returns with levels of general education accruing on self-employed workers, both male and female, albeit with huge gender wage gap. The graduate level of education renders high returns for both male and female self-employed workers. On the other hand, VET is found to be beneficial only for self-employed men, and not for self-employed women. Given the insignificant returns to VET for women, it is uncertain how women may benefit from the reforms in vocational education brought about through NEP 2020. Unless there is a significant expansion in skilled jobs, no amount of policy reforms towards developing skills of labour force would fructify.

## **TECHNICAL SESSION 1.6**

### **Are Women in India in Gainful Employment? Insights from Labour Force**

**Namrata Singh Roy**, Assistant Professor, Department of Economics, Christ University, Hosur Road, Bengaluru, Karnataka

**Divya Pradeep**, Associate Professor, Department of Economics, Christ University, Hosur Road, Bengaluru, Karnataka

The present study attempts to revisit the ‘U’ hypothesis of female labour force participation in India. While the decade-long low and declining female participation in the labour market forms the declining part of ‘U’, from 2018-19, the participation rates show an increasing trend according to a nationally representative labour force survey. But are women in gainful employment? To what extent is education supporting female participation? To what extent do the present jobs fall in the ambit of social security?

Does this increase in participation help to mitigate the gender wage gap? The present study aims to address these important questions using survey reports. The analysis finds that while finding a trend reversal in female labour force participation may be encouraging, it may be too early to celebrate this as an outcome of economic development and better educational attainments.

### **Relative Occupational Aspirations and Youth Unemployment in India**

**Basit Abdullah**, PhD Student, Centre for Development Studies, Thiruvananthapuram, Kerala

**Vinoj Abraham**, Professor, Centre for Development Studies, Thiruvananthapuram, Kerala

**Ritika Jain**, Assistant Professor, Centre for Development Studies, Thiruvananthapuram, Kerala

An often discussed but less researched dimension of youth unemployment is the aspirations associated with jobs, and the mismatch between employment aspirations and their realisation. In this paper, we attempt to explore the misalignment between employment aspirations and the reality of labour market as a factor responsible for the higher incidence of unemployment among youth. Following the framework of socially determined aspirations, we argue that the aspirations are partially exogenous and are the product of particular socio-economic setup a person lives in. The achievements of the relevant cohort of people with who a person can identify spatially, economically and socially shape the employment aspirations of the person. Using nationally representative Periodic Labour Force Survey, 2018-19 data, we make the cohorts of people based on similar socio-economic context using variables such as gender, sector (rural/urban), district, social group and income quintile. We use the unitary method formula to assign aspired occupation level to an unemployed person based on the individual’s education level and the cohort’s average education and occupation levels. We define the

relative occupational aspiration gap (ROAG) of an individual as the difference between individual's aspired occupation level and the average occupation level of the cohort.

We find that youth compared to the adult population and females compared to male youth have higher relative occupational aspiration gap (ROAG). Higher ROAG among tertiary-educated youth shows that the misalignment/gap between employment aspirations and the reality of the labour market persists mainly among higher educated youth. We use multinomial and binomial Probit estimation to analyse the determinants of youth labour market outcomes. The results indicate that ROAG has a positive and significant effect on the probability of youth being unemployed. The effect of ROAG on unemployment is higher for females than male youth. We argue that increasing education raises job-related expectations and aspirations. As such, it is the discrepancy between desired and available employment opportunities that cause higher unemployment among youth. An effective policy approach requires focus on creating of better-quality jobs that match the aspirations of young educated labour force.

### **Employment Scenario in India Since 2011–12, What Do We Know?**

**Hari K S**, Assistant Professor, Gokhale Institute of Politics and Economics, Pune, Maharashtra

**Dnyandeve Talule**, Professor, Shivaji University, Kolhapur, Maharashtra

India's labour market has undergone many changes during the second generation of trade liberalisation. Mainly these changes are characterised by high unemployment rates both in the rural and urban areas and declining female labour force participation. This has not only led towards the jobless growth but also has drastically reduced the middle level manual employment opportunities. It is in the light of current debate on increasing unemployment, high inflation and job-loss growth in India, the present paper intends to understand the dynamics of employment and unemployment in India. Particularly it explores to have a better understanding of the dynamics in employment and unemployment across gender and in rural and urban labour market in recent times. The paper is based on the data sourced in from the NSSO Quinquennial surveys on employment and unemployment in India, periodic labour force surveys, ministry of labour data on provident fund accounts and the data of the centre for monitoring Indian economy. Our results based on various databases reemphasise the slow pace of employment generation post 2011–12. Declining female labour force participation in the rural labour market of India has supplemented the trend of increase in unemployment. Withdrawal of women from the labour market in rural areas can be identified as the major reason for the negative growth in employment in the country. The results of second annual report (2018-19) on Period Labour Force Survey by NSSO show a slow positive revival from earlier trend of an absolute decline in the number of workers. Besides this the payroll data reiterates the sluggish pace at which the organised sector created jobs in recent past. The present paper does also reiterate the need for a comparable time series dataset for understanding of Indian labour market in the long run.

## **Loss, Recovery and the Long Road Ahead: Tracking India's Informal Workers through the Pandemic**

**Nelson Mandela S**, Research Fellow, National Institute of Urban Affairs, New Delhi

**Paaritosh Nath**, Assistant Professor, Azim Premji University, Bengaluru

**Aishwarya Gawali**, Research Associate, Azim Premji University, Bengaluru

The paper examines the livelihood impact of the pandemic induced lockdown on informal workers in India and seeks to capture the extent of their subsequent recovery or lack thereof. We present findings based on the Covid-19 Livelihoods Phone Survey, a panel dataset of 2778 workers across 12 states of India, whose information has been captured for three time points- before, during and post the 68 days nationwide lockdown imposed in March 2020. This data was collected via two rounds of phone surveys by the Azim Premji University, once during the month of April-May 2020 and again during October, November, and December 2020.

The socio-economic consequences of the pandemic are shaped by the dynamics of capitalist development that predate covid-19 (Pattenden et al., 2021). The pandemic struck India at a time when its economy, especially the informal sector, had suffered serious setbacks in the last quinquennium. As Harris-White (2020), notes the ill-conceived policy of demonetisation in 2016 dealt a massive blow to the informal economy. That was followed by the implementation of the goods and service tax (GST) in 2017. GST resulted in perverse redistribution in favour of large firms from small firms due to delays in refunds. It also undermined the states in relation to the centre through delays in payment of GST compensation that are due to the states. Together Demonetisation and GST disrupted the informal economy resulting in loss of livelihood and income for the classes of labour.

Based on secondary data obtained from the Periodic Labour Force Survey (PLFS) 2018-19, we attempt to highlight certain key features of India's informal economy (prior to the pandemic) that helps in providing a context to the narrative of job loss and recovery that emerges from our survey findings.

The objective of the survey is to map the extent of recovery observed with respect to employment and earnings. We examine employment trajectories across different groups to highlight the differential impact across different demographics. Furthermore, we try to study the impact on households in terms of asset loss and mounting debt.

Our results show that six months after the hard lockdown, one out of five persons were still out of work. Conditioned on being employed prior to the lockdown and having lost work during the lockdown, we find that urban respondents, females, workers above sixty and graduates were significantly less likely to recover from the shock.

Earnings were half of what they used to be prior to the pandemic. Some better-off workers shifted to more precarious types of employment. Poorer households were, furthermore, significantly more likely to borrow, and the amount of loan taken was multiple times their average monthly income. In the context of loss in employment and reverse migration, the survey results show a substantial unmet demand for work under the MGNREGA even after the lockdown was lifted.

We conclude that despite a partial recovery in the subsequent period, the pandemic induced lockdown has undermined the material conditions for subsistence of the vast majority of informal workers. With ominous signs of livelihood crisis emerging with the consecutive waves of infection, it is essential that the lessons we learnt from the first wave be kept in mind while devising appropriate policy responses and measures. This paper is an effort towards this end.

## **TECHNICAL SESSION 1.7**

### **Effect of Fertility on Paid Work Status of Women in India: Evidence from NFHS-4**

**Amrita Chatterjee**, Assistant Professor, Madras School of Economics, Chennai, Tamil Nadu

**Gunjan Khandelwal**, Research Scholar, Delhi School of Economics, Delhi

Female labour force participation (FLFP) is an important driver of economic growth. However, the relationship between women's participation in the labour force and development is complex as it varies greatly across countries, reflecting differences in economic development, educational attainments, fertility rates, child-care services, gender norms, etc. High fertility is considered a major barrier to the labour force participation of women. India has experienced a decline in the fertility rate: the national Total Fertility Rate was found to be 2.2 in the NFHS 2015-16 survey, a decline from 2.7 in the NFHS 2005-06 survey. On the other hand, girls' primary school enrolment has reached parity at boys, and universal enrolment was achieved in 2015. Despite increasing educational attainment and declining fertility, FLFP has fallen in recent years even after taking into account the delay in entering the labour force due to increased schooling. Given this contrasting scenario, the current study intends to investigate how fertility affects the labour force participation of women in India using nationally representative survey data from NFHS4.

Even if most of the empirical studies accept a negative relationship between childbearing and FLFP, there is a long-lasting debate regarding the causal interpretation of the association between the two. There is theoretical literature that supports that fertility and labour force participation are jointly determined. There can be several reasons behind this endogeneity. First, there can be reverse causality in the sense that career-oriented women may choose to have fewer children. Next, there can be some omitted variables that can influence both fertility and labour force participation.

Given this background, we observe that there is a dearth of literature exploring the FLFP-fertility relationship for different age-cohorts and acknowledging the inherent endogeneity as well as the rural-urban difference, especially in the Indian context. With this motivation, we use NFHS-4 data to employ an instrumental variable (IV) method to estimate the relationship between fertility and women in paid employment using the IV-Probit model. Our contribution to this body of literature is that we use district-level fertility rate as the IV for fertility and perform a series of sub-sample analyses to investigate how the number of children ever born to women affects their probability of participating in the labour force in rural and urban areas, for different levels of education and different wealth classes. Moreover, the uniqueness of the paper lies in introducing an interaction term of women's empowerment indices with fertility that acts as a channel through which fertility affects work status of women. We expect women empowerment to change the perspective of women towards their participation in paid work even after childbearing.

We estimate an IV-Probit model with fertility as the endogenous regressor. The results suggest that with a larger number of children, women are 14% less likely to be engaged in paid work, an expected result. As raising the children is time-consuming and traditionally in India, it is the responsibility of mothers to become the caregivers and caretakers of children, they find it difficult to explore a paid work opportunity. That effect becomes more pronounced when we control for women's freedom of mobility and decision-making power at the household level, as both impart a positive impact by motivating women to join a paid employment opportunity. For further investigation into the channel of women empowerment which can affect the relationship between fertility and work status of women, we have introduced "interaction" between fertility and high freedom of mobility and high autonomy, respectively. The results suggest that women with high autonomy and high decision-making power are more likely to be engaged in paid work, even after childbearing. This is a new dimension that the current study is adding to the "fertility and paid-work" status relationship.

We have done a series of subsample analyses to check the robustness of the results. Rural women are negatively affected by childbearing responsibility, whereas it has no impact on urban women. With respect to the education level, women with no education and educated till primary are less likely to be affected by childbearing but women with higher education are much more likely to be affected. As far as the wealth status is concerned, women's probability of joining paid work is likely to be negatively affected in poorest and richest groups, and not much in other groups. With an age-group specific study, we obtain that, women in reproductive age-groups are more likely to stay back home to take care of their children as they have kids compared to women beyond the age of 35 years. This paper points towards the need of more childcare facilities and support from the family members so that women even after having children can continue to work. Women's empowerment is the key, which can contribute significantly to motivate women to break the gender norms and continue to work after childbearing. The maternal benefits provided by different organisations can also be more women friendly and the working hours can be more flexible for women with smaller children. The gender norms from the societal point of view and company laws from Government's point of view should be more encouraging so that more women join the labour force even after childbearing.

## **The Dynamics of Task Automation and Worker Adjustment in Labour Markets: An Agent-based Approach**

**Arvind Upreti**, PhD Student, International Institute of Information Technology Bangalore, Bengaluru, Karnataka

**V Sridhar**, Professor, International Institute of Information Technology, Bangalore, Karnataka

Artificial Intelligence (AI) and associated technologies are rapidly automating routine and non-routine tasks across industries and can severely disrupt labour markets. The technical performance of Artificial Intelligence has risen steadily in the last decade due to rapid investments in research and development by academic institutions, private firms, and government organisations. The state-of-the-art computer vision, language, speech, concept learning, and theorem proving algorithms have demonstrated near

human-level performance on various benchmarks. Such advancements have incentivised firms to develop products and processes using AI that open new revenue streams, improve the quality of their services, or reduce costs through automation. The choices made by firms to deploy AI technology can have varying outcomes for workers in the labour market. Firms that create new products and services by synthesising AI with human-centric abilities can generate new employment opportunities. However, firms that primarily deploy AI to improve productivity and lower costs in existing tasks can affect the labour market outcomes in complex ways. While the workers associated with tasks susceptible to automation can face displacement and downward pressure on wages, the workers skilled in hard-to-automate tasks can experience increased demand owing to the higher productivity of firms in the automated tasks. In addition, these effects can widely vary across different sectors and geographies.

Out of the multiple interventions suggested by policymakers to ameliorate the condition of displaced workers, worker training and redeployment into the labour force stands out due to its economic and social appeal. In order to design such programs, it is imperative to understand the feasible pathways along which displaced workers can transition to occupations with lower risk of automation and better employment prospects. In addition, as investments in human capital is an economic decision for workers and firms, it is essential to examine the costs and benefits of stakeholders while incentivising them to undergo training for firm-specific or generic skills. To this end, neoclassical economics has provided important insights into the labour market dynamics. However, the focus has been on providing explanations for the stylised facts about aggregate regularities and assuming hyper-rational and homogenous firms and workers. Evolutionary economics offers a plausible alternative by focusing on the interactions between heterogeneous agents and observing the co-evolution of aggregate variables in the labour market. However, there has been limited work focused on understanding the labour market outcomes in industries adopting AI-based automation where workers make retraining decisions to adjust to the displacement effect of automation.

This paper proposes an evolutionary model of labour market dynamics that explores the implications of worker retraining and redeployment across a task set in an industry that undergoes technology shocks induced by automation. The model presents an economy consisting of firms and workers who are bounded rational agents. Firms produce and sell a homogenous service by combining the outputs of a task-set generated by either labour or machines. Workers are heterogeneously skilled in the task-set, hold an adaptable expectation of wages based on their skills and search for vacancies available in the labour market. The economy undergoes a sequence of technology shocks during which automation diffuses in the industry and firms stochastically automate a subset of their tasks. The workers displaced due to automation of tasks in a firm can get reskilled in tasks of other occupations. However, the workers decide to invest in human capital after comparing the cost of acquiring the required skills with the net present value of incremental earnings associated with tasks that they seek to get redeployed into in the near future. Interactions between agents' behaviour generate the macro-dynamics observable through aggregate variables such as unemployment levels and wage inequality among workers. A vital feature of the model resides in the formulation of feasible mobility pathways of workers between occupations represented in the form of a directed graph and probability matrix. The

model focuses on the influence of workers' retraining choices on the employment levels and wage inequality in the labour market.

Simulation results indicate distinct tipping points for unemployment and wage inequality with changes in mobility pathways along which workers retrain and redeploy across occupations. An increase in the density of mobility pathways induces a reinforcement effect on employment. Retraining displaced workers without building dense and well-distributed mobility pathways across occupations could widen wage inequality due to excessive crowding of workers around specific tasks. Our work focuses on the Finance and Insurance industry dataset, where we observe that the reskilling of displaced workers along occupation mobility pathways assisted by a lower retraining cost improves the unemployment levels. Also, if the firms aggressively automate their tasks, an increase in the cost of retraining increases inequality of wages in the labour market.

### **The Fourth Industrial Revolution and Future of Labour Market in India: Implication for Skills Development**

**Falendra Kumar Sudan**, Professor, Department of Economics, University of Jammu, Jammu

In the last over five decades, technological transformation has changed economic world drastically. Currently, the world is experiencing substantial penetration in digital innovation. The ongoing process of technological upgrading is termed as "Fourth Industrial Revolution (4IR)". The 4IR refers to high speed and profound alternation of new technologies, which significantly changed the employment markets. The growth of digital technologies can be a highly advantageous to Indian labour market, if India plan tap these digital opportunities specifically the digital economy through education, e-business, digital payments, and other relevant technologies. However, the 4IR also pose novel barriers such as the scarcity of skilled labour with adequate qualifications. Therefore, India should plan to leverage the skills and training to meet the needs of labour market in the context of the 4IR. The acquisition of necessary skills can bridge the skill gaps in Indian labour market. There is need to match the skills demand and supply to foster the mobility of skilled labour and vocational and university graduates with the 4IR-compatible skills in labour market. Besides vocational and university education, on-the-job training must create necessary technical and practical skills for the 4IR-compatible Indian labour market. There is need to bolster skills mobility in high demand vocational occupations rather than workers with threshold skills. With above backdrop, the paper reviews the impact of the 4IR technologies on skill flows and labour mobility in developing economies, and draws skills implication for manufacturing sector such as garment manufacturing and services sector like tourism, and ascertains the potentials and challenges of the 4IR technologies for growth and labour market. Lastly, some policy implications have been drawn for skills development and labour market in India and offered direction for future research.

The 4IR technologies have substantial implications for growth and the labour markets. Therefore, there is need to mitigate the unintended adverse consequences for labour markets. Strong labour market regulations and skills development and trainings are needed to enhance the agility and ability of the workforce to exploit the strength of the 4IR. A holistic approach is needed for collaborative

actions of the government and relevant ministries to reap the opportunities presented by the 4IR. The technologically displaced workforce needs reskilling and retraining through appropriate institutional development in the 4IR-compatible technologies. The digital infrastructure should be developed through stronger public-private participation. There is need to reorient the technological policies, labour markets, and educational policies to maximise the outcomes of the 4IR. Strong government–industry collaboration is essential for the 4IR-compatible skill development for sustainable and decent jobs. There is also need to evolve the policy mechanism for stronger cooperation and integration among the States and Union Territories of India to expand labour markets for development of SMEs. This can foster the SMEs to source workers and the 4IR-compatible skills from a bigger pool. The robust cooperation and collaboration among the States and Union Territories can generate novel collaboration opportunities for the 4IR-compatible skills development in cost-effective ways. The collaboration among the States and Union Territories can address the challenges of the 4IR technologies, capture the opportunities and manage the associated risks.

The 4IR-compatible skills mismatch is high in India, which require substantial attention to reskilling and skills mobility. Therefore, there is need to understand the recent growth performance and employment trends and how future growth will impact the 4IR-compatible skills and labour market in India. How the government can support development of talent clusters to increase the supply of highly skilled workforce? What types of enabling environment are to be created to development highly skilled workers to reap the opportunities and address the challenges of the 4IR technologies? Which types of digital infrastructure is needed and how the investment for the 4IR-compatible skills development can be raised? These questions are vital for future research agenda. New research is needed to deeply understand the existing skills gaps and to offer policy solutions to bridge the skills for reaping the benefits of the 4IR for the labour markets. The research is also needed to analyse the types of skills required covering the basic, intermediate, and advanced technical skills for future workers in industrial sector including determining the duration of training, and channels and mode of training required such as training needs for displaced workers through formal training, training of new entrants through apprenticeship and on-the-job training, and training of future workers through formal education and training along with the need to reorient formal curriculum to enable future workers to enter the job markets without on-the-job training.

### **Revisiting the Changing Structure of Employment in the Indian Labour Market**

**Balakrushna Padhi**, Assistant Professor, BITS Pilani, Rajasthan

**D. Tripathi Rao**, Professor, Indian Institute of Management, Lucknow, Uttar Pradesh

**T. Triveni**, Economic Officer, Krishi Bhwan, Ministry of Agriculture, Govt. of India, New Delhi

While Indian economic growth optimism over the last three decades is shaped by three quintessential socio-economic-political forces such as democracy, demand, and demography, yet the impressive and higher rates of economic growth hardly resulted in any significant employment generation. On the

contrary, India has witnessed a significant fall in overall employment elasticity and in turn a sharp decline in employment growth in few sectors. Against this backdrop, we examine the changing contours of employment and education in India from 2004-05 to 2019-20 using the latest EUS (2004-05 & 2011-12) and PLFS (2017-18 & 2019-20) survey. The estimates reflect that the low employment elasticity from 2011-12 to 2019-20 and the inability of the non-agriculture sector to absorb the additional labour force has resulted in a significant rise in unemployment. The declining WFPR, low intensity of labour employment, and increased unemployment rate depict a disappointing performance of the economy. There is also a growing level of unemployment for the higher education category. Apparently, rather than creating more jobs, economic growth has displaced more workers from their existing jobs, and hence needs urgent policy intervention. Investment in education, employment, health, and other basic economic social and infrastructure expands human capacity to participate in new economic and social opportunities. Therefore, it is important for ensuring economic and social justice the access to quality and 'decent' employment opportunities for all.

### **Mentoring for Enhancing Abilities and Self-efficacy Among Women for the Indian Micro Sector during the 'New Normal'**

**Seema Singh**, Professor, Delhi Technological University, Delhi

The micro sector is very significant for the Indian economy not only for its contribution to the national GDP and for creating employment but for the share of women's employment (20.44 percent of the total micro sector employment) also (GoI, 2021). After experiencing the devastating effect of the pandemic as demand & supply chain and transportation disruptions, cancellation of export orders, and raw material shortage, the whole economy including the micro sector has started operating with some self-restrictions. In this background, the paper discusses the need of mentoring women for enhancing their abilities and self-efficacy to improve women's participation or if they are already working in the sector, to scale up their activities under the 'New Normal'. The analysis has been done for the following objectives:

<i>No.</i>	<i>Alternative Hypothesis</i>	<i>Statistical Tools</i>	<i>Type of Data</i>
H <sub>11</sub>	Identified factors do not affect women participation in the micro sector	Correlation	Secondary
H <sub>21</sub>	Women participation in Micro sector is not significantly explained by CSR expenditure and crime against women	Linear Regression	Secondary
H <sub>31</sub>	Online Method $\neq$ Face-to-Face Method for Mentoring for Mentoring	Independent Samples t-test	Primary

To discuss the first and second objectives, relevant data has been used for the year 2019-20 for the Indian states. The third and final objective of the paper is to investigate the difference in the impact of the mentoring session imparted through two different methods i.e., online and face-2-face. The

primary data of GWI funded project titled, “Enhancing Employability Skills for Empowerment of Girls and Young Women” has been used. Before the COVID-19, mentoring sessions were organised at Patna and Delhi on employability skills, health, nutrition & well-being, and legal skills between December 2019 and March 2020. After COVID-19, again the mentoring sessions were organised online during January 2021. To take the feedback of these three topics, a questionnaire was developed consisting of three, eight and three questions respectively on each topic. In both methods, participants filled the questionnaire based on a Likert scale of five, before and after attending the session to assess the extent of additional knowledge on the topic from the mentoring session.

Correlation has been calculated for women in the micro sector with variables as the logarithm of per capita State Gross Domestic Product, Corporate Social Responsibility (CSR) expenditure (in crores), crime against women, women with 10 or more years of schooling, women who have ever used the Internet, current use of any family planning methods (currently married women age 15-49 years), women having savings accounts that they themselves operate and women having a mobile phone that they themselves use. The CSR expenditure in crores and crime against women has a positive and significant correlation. The correlation between women in the micro sector and having a mobile phone is negative and thus, needs further investigation because, under ‘New Normal’, tools of information and communication technology (ICT) as Internet social media and mobile phones have become very important.

The second objective is seen from a regression equation. Women’s participation in the micro sector is correlated significantly to the independent variables i.e. CSR expenditure and crime against women. The independent t-test results reject the Null Hypothesis for all except the participants’ knowledge about ‘nutritional requirements during pregnancy.

### **Series of Funding in Indian Start-Ups: Does Gender of Cofounder Matter?**

**Khanindra Ch. Das**, Assistant Professor, Birla Institute of Management Technology, Greater Noida, Uttar Pradesh

**Pooja Malik**, Assistant Professor, Birla Institute of Management Technology, Uttar Pradesh

Start-ups in India have grown exponentially since the launch of the start-up-India programme. Start-ups not only create employment for the co-founders but also provide jobs to many job seekers. However, to reach scaling levels and high growth, funding plays a crucial role. However, there could be inherent gender biases, leading to additional challenges for women co-founders. In this study, we examine the number of rounds of funding mobilised by Indian start-ups and empirically investigate the impact of gender of the cofounder after controlling for other predictors of funding. We use count data models, namely Poisson and negative binomial regression, to estimate the likelihood of mobilising multiple rounds of funds. The results suggest that there is a gender effect as the start-ups with women cofounders were found to have lesser number of funding rounds.

Even though start-ups in India have made significant strides in spreading across sectors and cities and venture capital funding has grown concomitantly, in several sectors consolidation can be seen

through acquisition exits. The findings of our analysis suggest that women cofounded start-ups receive significantly lesser number of funding rounds compared to male only start-ups. There is no beauty premium in raising multiple rounds of funding. Repeat funding assumes significance for scaling up of the new ventures, for continued growth and customer acquisition and for employment generation. The results suggest that women cofounded start-ups experience bias in multiple fund mobilisation. However, it could be driven by risk aversion among women entrepreneurs and reluctance to mobilise multiple rounds of funding. Apart from cofounder team, start-up age, and ecosystem related variables, the entrepreneur-specific attributes such as gender and risk aversion could shape the new venture growth and employment creation. In the presence of gender bias, high growth in women cofounded start-ups could be dependent on personal and business equity funding thereby leaving a question mark on inclusive ecosystem development.

## **TECHNICAL SESSION 1.8**

### **Constraints on the Labour Market Trajectory of Youth and Growth of NEET in India**

**Jajati Keshari Parida**, Assistant Professor, Department of Economic Studies, School of Social Sciences, Central University of Punjab, Bhatinda, Punjab

This paper explores the trends, composition and determinants of rising Not in Employment, Education and Training (NEET) population in India. Based on the national level employment unemployment surveys and macro level panel data, and using Instrumental Variable (IV) Probit and System GMM regression models, it is explored that a set of supply and demand side factors restricts the labour market trajectories of educated youth. The growing mechanization in agriculture, stagnant real wages, sluggish non-farm sector output growth, infrastructural backwardness and the existing social-cultural setup in which educated youth live together create a negative environment that compels them to remain out of the workforce for a longer period even after completion of their education/training. Based on these findings, it is argued that policies aiming development of infrastructure along with promotion of industry should be given top most priority, to boost non-farm sector output and employment growth for checking the upsurge in NEET population in India.

### **Precarious Self Employment in India: A Case of Non-agriculture Own Account Workers**

**Tulika Tripathi**, Assistant Professor, Central University of Gujarat, Gandhinagar, Gujarat

**Nripendra K Mishra**, Professor, Banaras Hindu University, Varanasi, Uttar Pradesh

There is an explicit thrust in India, especially in the present political regime, on promotion of self-employment. Often, an argument is made that self-employment is a better type of employment, without distinguishing between voluntary self-employment and involuntary self-employment. Historically, self-employment has been always the largest type of employment, being almost half of total workforce in 2019-20. Rise in self-employment in India is part of the larger processes of declining formal employment, operation of global production networks, out-sourcing of work (or contractualisation of work), weakening of labour movement and neo-liberal economic reforms. This has created a labour class that is neither proletariat nor bourgeois but a petty producer integrated in GPNs through mediators called 'contractors.' These producers are basically labourers who have been pushed out of the factory system and forced into self-employment, often earning even less than casual wage workers. It was not possible to know the earnings of self-employed workers from labour force surveys of India before 2017-18. But, Periodic Labour Force Survey (PLFS) has collected this information for 2017-18, 2018-19 and 2019-20.

The present paper uses this data from PLFS. A threshold level of earnings (TLE) which can be considered adequate (as determined by an expert committee of the GoI and similar to the idea of living wages) is estimated to estimate the extent of low pay in these self-employed workers. It is postulated that lowness of pay is the most severe in the bottom segment of these workers, namely Own Account Workers (OAWs). These are workers working without any hired labour. Therefore, the present paper limits itself to these workers only. It is shown that these workers constitute more than two-third of self-employed workers. There is a clear caste and gender dimension in composition of these OAWs. Of course, there are variations in urban areas as compared to rural areas. It is interesting to note that percentage of OAWs in principal status has risen in India during 2011-12 to 2019-20; denoting rise in full time work as per major time criterion. More than three-fourth OAWs are below this TLE across all socio-economic groups. It has an important implication for labour movement and class relations. A distressed, fragmented, heterogenous and unorganised working class like these OAWs are least likely to offer any resistance to global capitalism unlike regular salaried employment or even casual employment in formal sector. It is argued that present emphasis on self-employment in India is a part of larger question of political economy of working class.

### **Media Labour in Times of Pandemic: Employment Insecurities of Journalists and Newspaper Workers India**

**Babu P Remesh**, Dean, School of Development Studies & Director, Centre for Research Methods,  
Dr. B.R. Ambedkar University Delhi (AUD), Delhi

The paper provides an assessment of the impact of Covid pandemic on print-media industry (with special focus on newspaper segment) and to understand its employment and labour implications. Various challenges faced by newspaper industry during the period of lock-down and possibly afterwards (such as dipping circulation, plummeting advertisement-revenues, permanent erosion of readers towards other media forms - especially online news-platforms and so on) and its overall impact on the news-economy will be examined in the paper. Responses of the industry to changed circumstances will be analysed in detail to understand the emerging media-culture in the post-Covid era. Subsequently, and more importantly, the paper attempts to understand the short-term and long-term implications on the employment, work culture and labouring scenario of newspaper industry.

The employment and labour issues of a wide range of media workers (including working journalists, non-journalist employees, stringers, freelancers, local distribution/circulation persons, newspaper vendors and so on) will be discussed and analysed in the essay. The paper relies on the preliminary set of information gathered as part of preparatory works of a larger study on this theme, and thus includes multiple data sources such as interviews (with journalists, newspaper workers, trade unionists) and information available in various media platforms.

The paper explains that the unexpected onslaught of Covid pandemic has considerably changed the labouring scenario of journalists and newspaper employees. The disruption in distribution of newspapers during the prolonged lock down and the fear of readers about the virus spreading through newspapers together brought in a complete havoc in the newspaper business. A large number of

journalistic workforce (including stringers and designers) and non-journalistic employees (such as distribution agents and hawkers) have lost jobs, or have faced severe pay cuts. Thus, essentially, it is argued that the pandemic has further fuelled the deteriorating trend of labour standards in the media industry, which is particularly true for its newspaper segment.

## **Industry 4.0 Technologies and Employment in Indian Manufacturing Sector**

**Bharat Singh**, Professor, Satyawati College, Eve., University of Delhi

**Balwant Singh Mehta**, Senior Fellow, Institute for Human Development, New Delhi

**Nand Kumar**, Professor, Delhi Technological University, Delhi

Innovative technologies and state of the art technologies such as industry 4.0 technologies (digital technologies) are rapidly disrupting the structure of businesses and employment. The estimates of the impact of digital technology on employment vary widely, from substantial job loss for both skilled and the unskilled workers, to potential job gains for highly skilled workers. The increasing adoption of digitisation in manufacturing sector is changing the nature of work, which is already dominated by flexible, contractual, informal workers exhibiting poor working conditions. In India, the manufacturing sector has immense potential for growth and employment generation. This sector currently contributes around 11 percent to the total employment and 17 per cent to the national GDP. India is regarded as second-fastest economy in the adoption of digital technologies amongst 17 leading economies of the world. According to an analysis by the Ministry of Electronics and Information Technology, Government of India, the country could generate up to \$1 trillion of economic value from the digital economy by 2025, if it successfully realises its digital vision. Recent NASSCOM report also says that Industry 4.0 is at an inflection point in Indian manufacturing, with more than two-thirds of Indian manufacturers embracing the digital transformation by 2025, thereby contributing to the goal of raising India's manufacturing GDP to 25 per cent. Overall employment scenario of Indian labour market is not encouraging, but alternative narratives suggest that India is favourably positioned to generate gainful employment through digitalization and the rapid growth of manufacturing sector.

Some recent studies suggest that the ongoing digital transformation of the economy would disrupt the existing structure of the economy and patterns of work. Other studies indicate that digital adoption contributes to the polarisation of labour markets and the hollowing out of middle-skilled jobs, with risk of being lost to such technology-led job displacement. Few others argue that the adoption of digital technologies is expected to generate many new employment opportunities in both manufacturing and services sectors. Thus, the advancement in digital technology and consequent increase in automation are likely to throw many challenges and opportunities in the Indian labour market. Digitalization isn't simply related to the increased production of goods, trade and services, but also about how digital intelligence has led to a paradigm shift in national economies, labour market, and business processes. There is in general, no consensus on how the recent trends in the adoption of digital technologies will affect job displacement, job creation, the quality of work and wages, and labour market regulations in the Indian manufacturing sector.

Therefore, this paper aims to examine how the progress of digital technology will transform the world of work using skill classification of International Labour Organisation (2012) and National Classification of Occupations (NCO). Required data have been sourced from Periodic Labour Force Survey (2019-20) of National Sample Survey Organisation (NSSO).

The findings of the paper show that the bulk of the workforce in India is still engaged in agriculture (44 percent), followed by trade, hotel and restaurants (14 percent), construction (12 percent), manufacturing (11 percent), public administration, health and education (9 percent), transport, storage and communication (6 percent) and finance, business and real estate (3 percent). Across skill levels, only 9 percent are high-skilled and medium-skilled, while majority of the workers (25 percent) are engaged in unskilled and low-skilled jobs (66 percent). In manufacturing also, only 6 percent are employed both in high and medium skilled jobs, which have high automation potential. On the other hand, three-fourth 75 percent of the total workers in manufacturing are engaged in low-skilled, and around one-fifth (19 percent) are involved in unskilled elementary jobs. The low-skilled and unskilled jobs involve operational knowledge and routine or manual tasks that can be easily automated by digital technologies. These jobs are generally low paid and include low skilled workers such as clerical support workers, services and sales workers, crafts and related trades, machines operators and assemblers, armed force occupations, and elementary occupations or unskilled workers such as labourers, domestic helpers, building caretakers, porters and garbage collectors. Thus, a large proportion of workers with low-skill and unskilled work of a routine nature are vulnerable due to the possibility of automation in manufacturing.

It is argued that the manufacturing sector, particularly organised enterprises, has high automation potential. In particular, the capital-intensive manufacturing firms, such as the automobile and electronics sectors, are adopting automation to improve productivity. These firms are replacing manual and routine tasks, such as painting, welding, assembling, press machine operation, inspections and logistics functions with robots. The medium-size firms are slowly moving to low-cost automation, such as use of cobot, mobile cobot and other automatic devices. Activities such as operations of spinning, weaving, cutting, packing, sewing and folding are being automated by sewing bots, robotic handling devices, automatic folding machines and 3D garment designing. However, this may be not applied to all the manufacturing enterprises, as around 63% of workers fall either in the smaller category (less than 10 workers) or in the unorganised sector. Most of these enterprises have limited access to financial capital, infrastructure and the requisite skills to implement automation. They rely heavily on manual labour and unskilled or semi-skilled labour for their operations. Because, the cost of switching from manual labour to new machines for such enterprises is likely to be expensive and slow. But, a large number of these small unorganized enterprise also depend upon the middle or large enterprises, as they outsource the work to these small enterprises. So, the small or unorganized manufacturing enterprises will also have indirect impact of automation of larger enterprises in the long run.

The low-skilled and unskilled jobs are the most vulnerable and have higher potential of automation. Future technological developments require constant change in skill composition. The education and skill development regime in the country needs to address this issue through skills mapping and processes

of re-skilling. As the various sectors of the economy will be differentially impacted by digitisation and new technologies, there is the need for more sectoral research into the vulnerabilities resulting from such changes.

### **The Employment Impact of COVID-19 in Kerala: Is there a V- Shaped Recovery?**

**Kiran Kumar Kakarlapudi**, Assistant Professor, Gulati Institute of Finance and Taxation (GIFT), Trivandrum, Kerala

Kerala is known for its very high unemployment rates. The unemployment rate in Kerala was four times higher than the national average in the 1990s. However, the ratio showed a declining trend from 2011-12, and in 2019-20 the unemployment rate in Kerala was twice that of the national average. In this context, COVID has impacted jobs in Kerala with greater intensity. India accounts for one in seven people who lost jobs in the world. The highest employment decline was witnessed in Kerala in both waves. Thus, one out of eight people who lost jobs during the pandemic are from Kerala. Regarding recovery to pre-pandemic employment levels, Kerala (91.6%) lags behind the all-India average (98 %). The magnitude of the crisis is highly uneven across different sections of the society, with the impact being higher for vulnerable sections of the society. The highest decline in employment in Kerala during the first wave of the pandemic was in urban areas. The employment loss in urban Kerala was about 30 percent when compared to 10 percent at the national average.

The highest loss of employment in Kerala during the COVID first wave could be attributed to the massive loss of jobs in the construction and manufacturing sector. Almost 50 percent of jobs were lost in the construction sector in the first wave though it almost recovered in the second half of 2020. Similarly, Kerala lost three times more jobs in manufacturing than all of India, and the recovery of manufacturing jobs has been the lowest.

Globally and nationally, females and youth have lost more jobs during the pandemic. Consistent with the national trends, females and youth lost more employment in Kerala during the first wave. However, their employment recovery in Kerala is faster than the national trends. By May-2021, the number of females employed in Kerala during the pandemic increased as compared to the pre-pandemic period. This unique trend in Kerala could be partially attributed to the active role of women-led SHGs and the greater female participation in NREGA. In the second wave, youth in Kerala showed no decline in employment while non-youth lost close to 8 percent of employment.

During the first wave, the marginalised communities employment lost the highest employment (25%) in Kerala. A similar trend was observed at all India levels. However, their employment showed recovery is faster as compared to others. During the first wave, the employment decline was the highest among people with below primary education (50 % for Kerala 35% for all India), daily wage workers (35 % for Kerala and 17 % for all India), temporary workers and self-employed. The analysis indicates increased informalisation in the labour market as the employment of daily-wage casual labour and temporary jobs increased faster than others.

## **Skill in Indian Labour Market: Current Trends and Estimating Future Gaps**

**Sanjukta De**, Research Scholar, University Of Burdwan, Burdwan, West Bengal

**Dipa Mukherjee**, Associate Professor, Narasinha Dutt College, Howrah, West Bengal

**Jhilam Ray**, Associate Professor, University of Burdwan, Burdwan, West Bengal

Currently India is going through a stage where a major proportion of population is in their young age cohort compared to other developed and developing countries and this is expected to continue till next few decades. So, being a youthful nation with a higher proportion of working age population, high growth rate or demographic dividend can be achieved only if this working age population can be employed productively, i.e., them possessing employable skills. But of recent, several problems have been observed in the Indian labour market. Severe unemployment and skill mismatch are now a concerning issue. Unemployment among the youth is too high and is rising over time. Recent macroeconomic trends are also not favouring the labour market. A mismatch is observed between GVA share and employment share within different industrial sectors, indicating that there is a huge difference in labour productivity across industries. Lack of employment opportunity is also observed in different sectors, showing negative employment elasticities with respect to GDP.

In this context, this paper tries to forecast the labour market situation in the future. The present employment situation and projected employment pattern are observed across different industries and occupations. From the projected GDP growth and labour productivity growth we have projected the sectoral employment growth for 2018-2025, across industries. To forecast the skill specific labour demand and labour supply different skill groups are formed, which are based on the educational attainment in different streams of education. Then, skill specific labour demand is projected up to 2025. The projected results show that labour demand in the period 2018-2025 may decline by 3.1% per annum in the low labour demand scenario and may grow by 2.7% per annum in the high demand scenario. Labour demand in two extreme cases, that is in high demand scenario (7% GDP) and in low demand scenario (5% GDP) is projected to be 439.1 million and 382.6 million respectively. As a result of agriculture still being the dominant area of work, there will still be a considerable demand for unskilled and very-low-skilled workers. But the share of high skilled and very high skilled workers would increase considerably. The combined demand for the two top skill segments would be about 15 percent of the total labour demand. Considering the labour force of age 14 years and above, it is projected that the labour supply may vary between 481 million (low labour supply situation) and 523.6 million (high labour supply situation), depending on the population growth and LFPR. There will be a huge supply of unskilled and very-low-skilled workers compared to high skilled and very high skilled workers.

From the projected labour demand and labour supply scenario we have tried to forecast the future labour market situation across skill groups. Mis-match between labour demand and labour supply is observed both, in terms of quantity and quality. Future labour markets may face net surplus of total

workers, which would range from 10.6 million to 71.7 million. But the situation is quite complex because there will be both surplus and deficit in terms of the quality. Labour surplus is observed for lower-skill category and a shortage is observed for higher skill category. So, there will emerge a huge need for high skilled and very high skilled worker. This mismatch indicates the need for the formation of market-ready skills to reap the demographic dividend; otherwise, the labour market situation would further worsen. At the same time huge surplus supply of unskilled and low skilled labour has to be accommodated using the twin strategy of targeted employment expansion programmes and up-skilling them, so that they are absorbed in productive jobs. The employment challenge faced by India is complex and therefore requires multipronged strategies, otherwise the demographic disaster would explore at our face.

### **Effect of COVID 19 Pandemic on Employment and Earning in Urban India during the First Three Months of Pandemic Period: An analysis with Unit Level Data of Periodic Labour Force Survey 2019-20**

**Anindita Sengupta**, Associate Professor, Barrackpore Rastraguru Surendranath College, Kolkata, West Bengal

Urbanisation has accelerated the pace of development throughout the world. Big cities provide employment and livelihood for workers because of which workers have always migrated from rural areas to these cities. However, in India, most of migrant workers are absorbed in the low-paid and low-skilled jobs in the widespread informal sector. Most of these urban informal sector jobs lack written contracts, paid leave and social securities. Urban informal sector workers usually live in the slum areas and earn very low level of income which barely covers their subsistence level of living. However, availability of informal sector jobs throughout the year attracts workers in urban areas. With the outbreak of COVID 19, lockdown was declared suddenly without any notice in India during the last week of March 2019 and most of the urban informal sector workers suddenly lost their jobs and since they had no protection, they had been pushed into poverty. Those who somehow managed to retain their works, suffered from drastic decline in their earnings. India witnessed largescale return migration of these helpless and vulnerable workers back to the rural areas. This return migration was in the news headlines for a long time and this tragedy has long been widely discussed throughout the world. Due to the dearth of reliable data of loss of employment and drastic decline in earning of urban workers during the outbreak of COVID 19 pandemic and declaration of lockdown, it had been difficult for the researchers to measure the extent of such loss. However, detailed analysis of such losses is of utmost importance so that a perfectly appropriate remedial measure can be taken by the government.

Periodic Labour Force Survey report of 2019-20 has analysed the situation of labour market in India for four quarters from July 2019 to June 2020. Therefore, it is obvious that the last quarter of the data will give us the valuable information about the urban labour market during the first three months of the COVID 19 pandemic period. In this paper we have used the unit level data of Periodic Labour Force Survey of 2019-20 published by National Statistical Office, Ministry of Statistics and

Programme Implementation, Government of India. The data is divided into four quarters from July 2019 to June 2020. This implies that the last three months give us the information of labour market of India during the outbreak of COVID 19 pandemic and commencement of nationwide lockdown. We have used cross-tabulation method to find out percentage shares of employed and unemployed people urban areas according to gender and type of employment for the four quarters from July 2019 to June 2020. We have also tried to find the reasons behind the decline in income of workers during the first three months of the pandemic period using the Mincerian Wage equation. Since the dataset has many people who are unemployed and not earning any income, we have used the Heckman's Two-stage Selection Model to remove the sample selection bias. In this two-step approach we first conducted a Probit model regarding whether the individual participated in the labour market or not, in order to calculate the Inverse Mills Ratio, or 'non-selection hazard'. In the second step, we did the OLS wage regression model. In order to find out the significant reasons behind changes in employment in the first equation and changes in income in the wage equation across different quarters, we have used several interaction dummy variables interacted with the fourth quarter, i.e., the pandemic quarter. Our empirical results have shown that urban workers in India have lost jobs and suffered from significant decline in income during the first three months of the COVID pandemic period in almost all types of employment.

### **Informalisation of Formal Employment: A Case Study of India's Service Sector**

**Nayan Kumar Soren**, Ph.D. (Economics) Research Scholar, Indian Institute of Technology, Delhi  
**Shobhna Jha**, Young Professional, NITI Aayog and Research Scholar, Indian Institute of Technology, Delhi

People are gradually shifting from agriculture to the non-agriculture sectors for better livelihood opportunities. For years, slow pace of employment growth outside agriculture remained a major issue in India. There is a demand and supply mismatch from the workers and employers' perspective behind the slow employment growth. However, the informalisation of employment in the non-agricultural sector has emerged as a major concern. Due to the informalisation of jobs, workers are denied key employment benefits from the basket of job security, e.g., paid leave eligibility or numerous social security benefits. There are workers who are not eligible for all these mentioned benefits, but there is another category of workers eligible for some of the few benefits from this basket. This indicates an issue of informalisation of formal employment.

To examine this issue, we have taken the case study of service sector for the following reasons. First, the service sector has witnessed a rapid growth in employment during the first decade of the millennium and has emerged as the largest job provider outside agriculture. Second, the sector's contribution in value addition has remained the highest, generating employment relatively faster. Third, the service sector has remained the most job-intensive sector. Moreover, the service sector is the largest employment provider and has the highest employment elasticity across all sectors. There are

many factors responsible for the informalisation of employment broadly understood as individual and macro level factors. Through a case study of the service sector, we explain all these factors affecting the quality of jobs.

In the category of individual level factors, one of the major highlights of our analysis is that the number of years spent in formal education is a crucial determinant for entering formal jobs. Moreover, we have found that the technical education status is also important since many jobs require specific skills. Here, we have also found that women and youth are the most affected segments of the population due to the informalisation of jobs. Furthermore, we understood that workers are offered different combinations of employment benefits. The only tiny fraction of workers is offered a full range of employment benefits and, others get some of these benefits. The finding indicates towards the informalisation of jobs in the service sector. The service sector does not look very different in terms of informalisation of employment since both of these sectors operate under similar economic and regulatory conditions.

In the category of macro-level factors, we have explored the status of the service sector in terms of the size and share of formal employment in different states. In the service sector, skills are accumulated due to which a state higher level of education has higher share of formal employment for the service sector. For validation, we have checked the claim with the level of skills proxied by number of formal years of education. The results suggest that states with higher average years of formal education have higher share in formal employment for the service sector. As we know education is a subject of concurrent list of Indian constitution, the labour is also included in the concurrent list. Hence, we have analysed the status of informal employment based on tax revenue share to GSDP used as an indicator for state capacity. We have found that state capacity and share of informal jobs are inversely correlated. Hence, informalization of formal employment demands active government's role while its other concerns like definitional matters and practical aspects.

## **TECHNICAL SESSION 1.9**

### **Changing Trends in Employment and Wages across Agricultural Sector in the Rural India: Some Recent Evidence**

**T. Triveni**, Economic Officer, Directorate of Economics and Statistics, Ministry of Agriculture,  
New Delhi.

**B. Padhi**, Assistant Professor, BITS Pilani, Rajasthan

This study attempts to understand the trend, pattern and magnitude of gender-based employment and wage differentials in the agricultural sector of rural India. It also intends to throw new light on policies for poverty and inequality reduction and growth of employment and income. This study also discussed and quantified the wage differentials across agriculture sectors by various individual and household attributes. Using NSSO Employment and Unemployment data and PLFS (2004-05 to 2019-20), it quantified the average wage differentials among agricultural workers in the rural area since last two decades. To quantify the average wage differentials across genders, the Oaxaca-Blinder Decomposition has been used. In addition, the average wage gap across genders in agricultural sectors in the wage distribution is calculated using RIF Quintile decomposition analysis. The preliminary results illustrate that over last two decades the agricultural sector shows a negative employment elasticity with little acceleration in recent periods in India. Further, the socioeconomic characteristics also plays an important role while examining the wage differentials, as it is found that with same level of characteristics the workers belong to female groups have lower wages. Across the wage distribution the quintile decomposition analysis presents that at the lower end the average wage differentials or wages are lower for the agricultural wage earners. Mostly, out of all explained wage differential features, the endowment factors in terms of education plays an important role while analysing the average wage differentials among agricultural workers in rural India.

### **Patrilocal Residence and Women's Employment: Evidence from India**

**Tista Mukherjee**, Senior Research Fellow (UGC), Doctoral Fellow, University of Calcutta,  
Konnagar, West Bengal

Gender disparity is large in developing economies. Social science research over the last few decade's places increasing attention in identifying the root causes of gender gaps in the developing world, since economic underdevelopment only partially unfolds the phenomenon. Recent research has concentrated in investigating country-specific cultural institutions as the causes of shaping gender attitudes and discrimination. Keeping the level of development constant, cultural norms help to explain the large differences in women's empowerment.

The present study explores the impact of patrilocality, a widely practiced cultural institution that shapes the rule of post-marital residence of a newly married couple. According to patrilocal norms, a

woman requires to co-reside with her husband's family once she gets married. Recent scholarship has documented significant impact of patrilocality on son preference resulting in cross-country difference in the male-to-female sex ratio.

The present study extends the previous literature on this topic by evaluating the impact of patrilocal residence on women's status for the society as a whole. Using nationally representative data from Indian Human Development Survey (2011-12) it provides systematic empirical evidence on the impact of patrilocal norm on women's decision to work, and their visibility in labour market. The study reveals that the deterrence effect of such institution is robust to both rural and urban India. Finally, it goes beyond the earlier work by addressing endogeneity in a new approach. Using the number of rooms in the house as an instrument for co-residence, I find that patrilocality has strong negative impact on women's work in India. The instrument is drawn based on the literature of inter-generational co-residence among young married sons, which argues that a married son's post-marital co-residence with his parents is a strategic choice in developing societies. It largely depends on housing facilities and housing prices. I find that the number of rooms in the house strongly predicts a married son's living with parents, which in turn serves as a plausible exogenous variation in young bride's exposure to patrilocal co-residence. The instrument is able to go beyond the rural set-up and gives more robust estimates for the society as a whole.

The Women's Schedule of Indian Human Development Survey (2011-12) provides a rich dataset capturing detailed information about married women's socio-economic characteristics, gender relations, marriage history, etc. On the other hand, household- and individual-level datasets allow us to get a wide range of variables including household income, occupation, social capital along with health, education and work-related outcomes for each household member. I combine all three datasets for the purpose of our study and explore the impact of patrilocal residence on young married women's work-related measures. In baseline specifications, I use a binary co-residence indicator, reflecting whether the young bride is the daughter-in-law of household head. To see the robustness of the study, I also employ an alternative indicator of patrilocal set-up that measures whether the young bride lives with at least one of the in-laws. All the baseline specifications give consistent results with respect to the existing body of literature and show strong deterrence effect of patrilocality on all measures of married women's employment status in India.

To address the plausible endogeneity bias associated to the baseline specifications, I employ instrumental variable approach to identify the causal effect of co-residence. In line with the existing literature on intergenerational co-residence, we find the house size as a strong predictor of patrilocal co-residence. Using three instruments related to house-size, I find consistent estimates with respect to our baseline specifications confirming large negative impact of patrilocal set-up on young bride's employment status in India. All the IV-estimates are larger in magnitude and give robust estimates for rural and urban settings separately.

## **Does Experience Shape Perception? Evidence from Manufacturing Firms in South Asia**

**Prabin Chauhan Chhetri**, Research Scholar, Sikkim University, Gangtok, Sikkim

**Rajesh Raj**, Associate Professor, Sikkim University, Sikkim

In this paper, we explore a dataset of 10,154 firms across South Asia to study the pervasiveness of corruption in general and graft in particular. The data are from the World Bank Enterprise Survey (WBES) that cover business conditions across the globe. By employing hard data on corruption for South Asian firms, this study probes whether experience with corruption influences a firm's perception about corruption. To be specific, we see whether firms that paid bribe view corruption as an obstacle. A graft index has been constructed to capture the pervasiveness of graft. The study presents conclusive evidence to suggest that firms are susceptible to graft and firms that pay bribe view corruption as an obstacle.

The results suggest that experience of firms with corrupt officials influence firms' perception about corruption. Firms that are victims of bribes are more likely to report corruption as an obstacle, compared to firms that did not pay bribe. The variables, namely 'solicited but not bribed' and 'solicited and bribed' carry the relevant sign and significance. To be precise, the variable 'solicited but not bribed' yields a negative coefficient, suggesting that firms that did not encounter bribe request while applying for any infrastructural services or licenses and permits do not consider corruption as an obstacle. In contrast, the variable 'solicited and bribed' bears a positive coefficient, suggesting that firms that are victims of bribes consider corruption as an obstacle. These findings are clearly evident in the context of South Asia as a whole, and India in particular. The estimates for South Asia suggest that firms that paid bribe to 'get things done' are 3.4 percent more likely to consider corruption as an obstacle, while firms that did not pay bribe are 4.2 percent less likely to consider corruption as an obstacle.

At the country level, the marginal effects vary to a large extent. While firms that do not pay bribe in India are 4.3 percent less likely to report corruption as an obstacle, Pakistani firms that do not pay bribe are 15 percent more likely to report corruption as an obstacle. On the other hand, firms that paid bribe in lieu of any services are 3.6 percent and 18.4 percent more likely to view corruption as an obstacle in India and Nepal, respectively. Thus, the results from Probit and marginal effects unambiguously point to the fact that perception of firms about corruption stems from their personal experience with public officials. As a robustness check, the Probit regression is also estimated for only those samples who applied for any of the services. This exercise too yielded similar results. Thus, the findings are mostly robust across regions and across samples, thereby validating our stance.

We find conclusive evidence that perception of firms about corruption matches their experience with corruption at the ground level. To be specific, the study shows that countries with high CPI score are also the ones where firms pay less bribe, and countries with low CPI score are the ones where firms pay more bribe. Using WBES dataset, we first calculate the graft index, both at the firm level and the country level using information that emanates from personal experience of firms with corrupt officials when requesting for any services or licenses. On an average, firms in South Asia are the target of bribery one out of three times they request for infrastructure or licenses.

## Child Labour and Education in a Developing Economy: A Policy Analysis

**Rohan Kanti Khan**, PhD Scholar, University of Calcutta, Kolkata, West Bengal

**Sarbajit Chaudhuri**, Professor, University of Calcutta, West Bengal

**Jayanta Kumar Dwivedi**, Associate Professor, Brahmananda Keshab Chandra College, Kolkata,  
West Bengal

**Dibyendu Banerjee**, Assistant Professor, Serampore College, Serampore, West Bengal.

There was historical prevalence of the problem of child labour all over the world, especially in developing economies, and it still exists on a large-scale in Sub-Saharan Africa, Central and Southern Asia, Northern Africa and Western Asia. Besides this, the pandemic has resulted in an acute rise in poverty that intensifies the risk of child labour. In many scholarly works, abject poverty and lack of educational facilities are often cited as the primary factors responsible for the incidence of child labour in developing nations. Traditional wisdom recommends a hike in educational opportunities to eradicate the problem of child labour. Given this backdrop, this paper explores how the alternative policies to promote children's education by the government can result in a counterproductive result on reducing child labour in the presence of a privatised education sector. The families/households decide the children's time distribution between education/schooling and wage-earning activities as child labour by intertemporal utility maximisation. From the household optimisation exercise, the total demand for education services has been derived. A micro-theoretic general equilibrium model has been constructed for a distortion ridden developing economy. A diagrammatic representation of the demand and supply curve for education services is provided to explain the simultaneous determination of the price of education services and the incidence of child labour.

Two government policies to combat the problem of child labour have been analysed. First, the traditional policy of education subsidy per unit cost of education to the household has been considered. Second, the government policy to support the infrastructure development of the private education sector in the form of capital subsidy has been analysed, where it can be argued that the capital subsidy to the education sector can lower the cost of education, in turn which incentivises households to send their children to schools rather than in wage-earning activities.

This paper shows that initially, the education subsidy lowers the cost of education but ultimately it may fail to address the problem of child labour. Similarly, capital subsidy as a policy measure to lower the incidence of child labour may not be effective and in fact, it may aggravate it. Finally, it is shown how the characteristics of a developing economy play an important role in determining this kind of counterproductive result.

## **Informality and Control in the Gig Economy**

**Archana Aggarwal**, Associate Professor, Hindu College, University of Delhi, Delhi.

The landscape of work and employment has undergone a major change in the last two decades. The change is premised on mutually reinforcing economic, political and technological factors. This is not to say that traditional forms of work do not exist, but, along with those, new forms of work, gig work, in particular has become an important and growing source of employment in the urban areas. The term ‘gig’ stems from a slang word used by entertainers and musicians to describe a one-time job or performance. However, the reality of gig work today, for many workers at the bottom of the rung, is far removed from this meaning. The present paper focusses on two kinds of gig workers—food delivery personnel or riders and cab drivers. Based on interviews conducted with riders for Swiggy and Zomato; Ola and Uber drivers in Delhi-NCR; a few executives of companies and drawing upon a number of recent publications, I discuss some significant aspects of employment of such workers.

Firstly, the much touted and advertised flexibility of hours may be beneficial to workers who use gig work to supplement their income from an alternative source. Those dependent on gig work as their primary means of livelihood struggle to remain afloat. Secondly, although gig workers are called ‘freelancers’, enormous amount of managerial control is exercised through the mechanism of feedback, ratings, rankings and algorithms. Lastly, the companies which set up the platforms or the digital interfaces between the customers and the workers, treat themselves as ‘matchmakers’ for supply and demand of services. These companies do not treat workers as their employees and thus the workers are bereft from any protection under the labour laws. Employment in the gig economy is layered upon an increasing informalisation and casualisation of labour. For most of the workers, gig work or employment in the gig economy has only managed to accentuate the informality and precarity of work.

## **We Know What is Good for Her: Women, Education and Work**

**Rama Devi**, KREA University, Sri City, Andhra Pradesh

A glaring gender disparity is notable in the Indian labour-market where female labour-force participation is considerably lower than that of the men. Decline, and even stagnation, in female labour force participation in Indian context is specifically bewildering, as it is unfolding at a time when female education level, which is deemed crucial to engage in paid employment, is rising. Education is often conflated with women empowerment, autonomy, financial independence, and elimination of gender disparities. Financial dependence on male members of the family is one of the reasons that legitimises and aids in structural subordination and unfreedom of women. Access to formal education is considered to possess the potential to usher weakening or rather eliminating this oppressively imposed dependence by enhancing female employability and easing their entry into the labour-market. This paper argues that establishing such simplistic interconnections evade how hidden constraints of socio-

cultural conditions entwined with patriarchal ideologies influence and even partially prohibit women's access to education vis a vis work/marginalization in the labour-market. Examining the nature of educational access, occupational aspirations, strategies, and achievements of urban women residing in a lower-middle income Delhi settlement, the paper shows that patriarchal ideology impresses and controls nature and outcome of the education they obtain. In the settlement, while most young girls are pursuing higher education, not everyone is expected to use their higher educational degrees to secure a paid employment. The patriarchal norm expects men to earn a livelihood whereas women's engagement in the paid employment is conditional. Unlike men, women are not encouraged to engage in every form of work as the nature of female occupation are tied to the notion of honour and reputation of the family. Locally prevailing patriarchal norms dictate and define what constitute respectable work for women. They are permitted to aspire and engage in the reputable work. Further, mere ability to obtain a respectable work does not guarantee women to be in paid employment, it is influenced by the economic condition and caste location of the family. Importantly, the decision of women to enter the labour-market depends on attitude of their family members, natal or conjugal, towards the work and working women.

## **TECHNICAL SESSION 1.10**

### **Agrarian Institutions and Intersectoral Linkages: Implications for Agricultural Households**

**Sahil Mehra**, Ph.D. Candidate, South Asian University, New Delhi

We explore the complementary relation between agri-institutions and inter-sectoral linkages in improving the economic wellbeing of agricultural households. While there has been much work on understanding the role of intersectoral linkages and agri-institutions separately for agricultural growth, there has not been any rigorous study to understand the importance of both these factors together in the case of India. Using input-output transaction tables (IOTT) from CSO, we calculate linkage values for different crops for the years 2003-04 and 2013-14, and show that overall forward linkage values for majority of the crops have increased over this period. We construct a pseudo-panel using farm-household level data from the 59<sup>th</sup> round (2003) and 70<sup>th</sup> round (2013) of the Situation Assessment Survey of Agricultural Households conducted by NSSO. Given that 2002-03 and 2012-13 are considered to be the drought years that had deleterious effect on agricultural yields and incomes for these years, there is a possibility that the drought might have affected the change in income between the two years. Furthermore, agri-institutions like, source of credit, agency to which output is sold, awareness about MSP, technical sources of information, etc., and household characteristics like caste and gender are identified that play an important role in determining the economic conditions of the agricultural households. We find that the access to agri-institutions by agricultural households is highly differentiated across various land-size and caste categories. Using a multivariate regression framework, we find that in the presence of access to certain agri-institutions, the households' incomes are positively associated with the increase in linkages between agriculture and industry. Through this we also find certain key institutions such as awareness about MSP, access to formal/institutional source of credit, and access to source to which output is sold are relatively more important than others. With further analysis we show that the magnitude of linkage effect on household agricultural incomes is much higher for households who have access to these key agri-institutions vis-a-vis those who do not. Such complementarity between sectoral linkages and agri-institutions is crucial because it provides basic structural and institutional support so that higher agricultural surplus can be produced, exchanged with other sectors and/or can be reinvested for growth within the sector. The analysis shows that better intersectoral linkages in themselves may not be sufficient in bringing about growth in a sector, and highlights the importance of combining access to institutions with improving intersectoral linkages for improving the economic well-being of agricultural households.

## **Worsening Economic Status of Rural Women: Yet another Shock**

**Neetha N.** Centre for Women's Development Studies, New Delhi

The overall decline in women's work force participation rate in rural areas with sudden shifts, has been a matter of much interest. The sudden increase in rural wpr in 2004-05, largely due to the increase in the share of unpaid workers, is now largely acknowledged as an outcome of the rural economic crisis in this period. The PLFS data for 2019-20 shows a small recovery of women's wpr in rural areas and there is again an increase in the share of unpaid work among women. Given this background the paper analyses the possible impact of the pandemic and its economic implications for women. Agriculture, the most important segment of women's employment in rural areas was largely unaffected by the pandemic. Given the trend of a decline in casual wage and an increase in unpaid work in agriculture among women before the pandemic combined with loss of employment in non-farm sector due to the pandemic, women's economic condition seems to have further worsened. The paper based on insights from case studies conducted in three districts of Punjab among women from suicide affected families and discussions with various stake holders analyses the impact of the pandemic on women's employment. The loss of non-farm employment of women/family members, in many cases meant women either relying on loans from informal sources and/ or taking up available wage employment to overcome the sudden economic crisis. Women are finding it difficult to repay such debts in the absence of shortages in employment opportunities. Further, limited wage employment possibilities are forcing women to take up any work that is available with poor conditions of work. Women from landed families are also found spending more time as family labour, to address the shortage of hired workers in farms. Overall, these changes have worsened the question of rural women's employment which is surely to have long term impacts.

## **Control and Resistance in Platform Economy: A Case of Beautician in Delhi NCR**

**Shipra,** Ph.D. Scholar, Jawaharlal Nehru University, New Delhi

The world of work is transitioning and dynamically evolving at a fast pace in last couple of decades due to the digital age of capitalism. Last decade and a half have witnessed growth of various digital labour platforms across the globe. These platforms act as mediator, claiming to provide an apparatus which brings together the supply and demand of labour digitally. Of the tripartite relationship between the owner of digital platform, service provider (partners) and service requestor, the two actors, i.e., the platform economy owner and platform 'partners' working through these platforms have a relationship of both cooperation and conflict.

This study examines the conflict within their relationship by focussing on control mechanisms used by the digital labour platforms on their 'partners' and the manners in which the 'partners' resist those control mechanisms. The study revolves around geographically tethered platforms that provide invisible

home-based beauty services to its service requesters in India. What differentiates these service providers from their famous ride-hailing or delivery counterparts is the requirement of minimal skills and education level in beautician job to get registered in these platforms. The beautician-service-providers who work through platforms mostly work with the perception that they are building their own brand through the platform. India traditionally had a small beauty industry catering to a very small section of society. The last couple of decades have seen substantial increase in number of beauticians. When performing through platforms, the service providers have to face various control mechanisms which are part of the service providing process. This includes performing beauty services in a standardised manner, as dictated by the platform. The control is not limited to the skill, products used and process of providing services, the service provider is expected to perform “Impression Management”. Service providers are dependent on their ratings on the platform as it is the only way of judging their work and developing their reputation. This reputation is quantified by the platform and in case of lower rating, they are deactivated from the service providers’ account. Thus, the service providers, along with performing their services, are forced to perform “emotional labour” just to maintain their work reputation.

Every action taken by the service provider has the Michel Foucault’s panoptic disposition of technological infrastructure attached to it. The beautician service providers are attracted to these platforms with the provision for flexibility in work timing, but various gamification methods are used to disrupt it, causing the workers with various work-related mental health issues. Other control methods used by the platform includes use of information asymmetries to constrain the workers’ choice and skewed contracts between the service provider and platform owners, which are more in favour of the latter. The service providers work on task basis and perform individual work with minimal contact with other service providers in the same company. These ‘partners’ own enough capital to buy the tools or raw materials that are required to perform the task. The scope of resistance of service providers is limited by employers by using technology to monitor workers’ activities and limiting their power to organise. These technologies, most of the times, end up violating fundamental rights to dignity, freedom of association and autonomy. The workers are encouraged to see themselves as freelancers, rather than collectively protesting class of workers. In the current scenario, oversupply of labour in market makes resistance even more difficult for beauticians. This leaves the service providers with little scope for negotiation for better wages and working conditions. Besides traditional trade unions, most countries lack strategies for organisation of gig workers. Workers’ freedom (to work whenever they want) is subtly and aggressively managed when they work through platforms. Current strikes in Delhi and across the world have shown that service providers have come up with ways to voice their dissent. Though not very successful, they have still been able to bring their issues to the notice of normal public and administration.

This paper looks at the various mechanism of resistance used by service providers, which ranges from cutting the customers off the platform after developing a relationship with them, to organising a formal protest with all the fellow service providers against their company. The study looks at resistance which includes both the macro level protests but micro level mechanisms used by the beauticians to safeguard themselves from the platform mediators. This is followed by a section on the changes that the platforms have up with because of the recent protests by beauticians.

## **Transforming Skill Gap Crisis into Opportunity for Up-skilling and Decent Work in India's IT-BPM Sector**

**Nausheen Nizami**, Associate Professor, Pandit Deendayal Energy University, Gandhinagar, Gujarat

**Tulika Tripathi**, Assistant Professor, Central University of Gujarat, Gujarat

**Meha Mohan**, Independent Researcher, Ahmedabad, Gujarat

The Fourth Industrial revolution (I4.0) is set to change the way we work in the 21<sup>st</sup> Century. Invented by us (humans), it is ironical to not prepare for the technological changes that have been developed for the greater good of the society. India has also begun experiencing the waves of I4.0. Robotics, artificial intelligence, Internet of things, and automation are being combined with existing production processes in many industries. Its magnitude depends on the cost structure and varying capital deepening in the Indian industries. The IT-BPM Sector is the prime driver for automation, artificial intelligence, IoT and analytics. However, it is not only accelerating and playing a key role in implementing the I4.0 in manufacturing, but also undergoing changes within its own industry.

The primary objective of this research has been to conduct a detailed study on the current status of skill demand and skill supply in India in general, and IT-BPM sector in particular. The secondary objective of the study is to review the performance and growth of IT-BPM sector in the recent years and the pace of technological progress in the sector. Secondary sources have been referred to identify the skill gap and frame a decent work strategy for the IT-BPM Sector. The paper finds an opportunistic scope in upskilling the workers to the new technology, as its workers with upgraded technology can positively contribute to the growth of the industry as well as economy. It is argued that the skills-gap crisis needs to be perceived as an opportunity for digital transformation of the economy and engine of growth for IT-BPM Sector. However, the key challenges lie in the adaptability of workers and reforms in education sector in alignment to the pace of fourth industrial revolution.

## **Factors Determining Participation in Rural Non-Farm Activities in Bihar**

**Maryam Sabreen**, Research Scholar, National Institute of Technology, Patna, Bihar

**Deepak Behera**, Assistant Professor, National Institute of Technology, Patna, Bihar

Bihar, the fastest growing states for having double digit growth of India, has recently witnessed a negative change in employment share in the non-farm sector. Therefore, much attention has been diverted to the rural non-farm sector to absorb the additional labour force. Hence, the present paper has undertaken the field data to analyse the factors that determine the participation of non-farm sector in rural Bihar. Using a Binary Logistic model, the result suggested that the participation in the non-farm activities in rural areas are mainly determined by the gender, age, religion, the social group to which the individual belong, operational landholding, and education. The results indicate that female workers are less likely to join the non-farm sector compared to male workers and the individuals below

35 years of age are more likely to join non-farm compared to the higher age-group. Religion, identified as a significant explanatory variable, shows that with reference to Hinduism, individuals belonging to the Muslim community are more likely to join the RNFS. Under social group, the shift of farm to non-farm sector in Bihar has mostly been for the upper castes. In terms of operational land-holdings, it is found that those who possess some land, are less likely to join NFE compared to those with no land, while individuals with better education are more likely to participate in the RNFE. Therefore, firstly, an effective human resources development programme, imparting necessary skills and training to rural youth; secondly, to identify and utilise local resources effectively in terms of both labour and resource endowments for an expansion of microenterprises; and thirdly, an effective utilisation of central programmes like Make in India and Skill India, can help create jobs in rural non-farm sector.

### **Determinants of Female Workforce Participation: Evidence from Rural Jharkhand**

**Swati Dutta**, Fellow, Institute for Human Development, New Delhi.

The aim of this paper is to examine the level of female work participation and its determinants in rural Jharkhand based on primary survey conducted in 1300 households spread across 7 districts. Probit regression model is used to understand the determinants of female work participation in the context of rural Jharkhand. The findings suggest that district wise variation in male work participation is much less compared to female work participation. The variation in female work participation across caste is much higher than variation across districts. This indicates that female work participation is a much more caste-based phenomenon than a geographical phenomenon. Probit regression result suggests that education level of the female, social groups and level of household income are the important determinants of the female work participation. Findings shows that education and incomes are negatively correlated with female labour for participation in rural Jharkhand. Women, with relatively much lower levels of education compared to men, were overwhelmingly in unpaid work. Family responsibilities and domestic chores account primarily for the low female workforce participation in the state. The second most important reason expressed by the respondents for staying out of work force is that there is lack of work opportunity near residence. Lack of mobility and availability of skilled work within village always hinders the women to be in the labour. The findings suggest that lack of education, caste, social norms are the major preventing factors for women to participate in the labour market. On the other hand, financial inclusion shows positive impact on female work participation. Hence to increase the female work participation there is a need to increase the education and skill level of the rural women. Also, there is a need to improve the conducive environment for women to participate in the work.

## Trends and Patterns of Wage Inequality in India: A Socio-economic Perspective

**Nikita Soni**, Research Scholar, Indian Institute of Technology Roorkee, Uttarakhand

**Falguni Pattanaik**, Associate Professor, Indian Institute of Technology Roorkee, Uttarakhand

India is committed to SDG goal 8 and goal 10 i.e., 'to promote decent work opportunity' and 'to reduce inequality' respectively. In India, since economic liberalisation 1991, wage inequality has received considerable amount of attention from researchers and policy makers as Indian economy is among the fastest growing economy of the world. However, it falls short in transforming growth prospects into equitable employment opportunities and conditions and thus, failed to address inclusivity issue. The employment conditions were more critical for the disadvantaged section of the workforce such as women, SC, ST, OBC workers and religious minorities groups. Despite having many labour laws and policy reforms for equal treatment at work and equal wages, the outcome isn't conducive for them. Most of these workers are outlined in blue-collar or secondary jobs and thus witnessed failure of equal work environment practices towards them. Post liberalisation, India recorded declining trend in the participation rate as well as disparities in wages against these groups. Furthermore, the dualistic nature of Indian economy tends to accentuate these gaps. Therefore, this study is undertaken to develop better understanding about the structure and distribution of wages across major socio-religious groups in the Indian labour market. It aims to decipher trends and pattern of wage inequality, mark its magnitude and intensity across entire wage distribution and also to account for factors that are responsible for marginalization and discrimination.

To address above-mentioned objectives, the study uses unit-level data from National Sample Survey Employment Unemployment Surveys (NSS-EUS) which is a nationally representative household-level survey conducted at every five years. It contains information on worker's demographic and employment characteristics. Eventually EUS got replaced by Periodic Labour Force Survey (PLFS) which is an annual survey. It measures the quarterly changes across various labour market indicators and released its first report in 2017-18. Henceforth, EUS 61<sup>st</sup> (2004-05) and 68<sup>th</sup> (2011-12) round and PLFS 2017-18 and 2018-19 data is used. The study estimates pattern of wage inequality using three measures of inequality i.e., ratios, inter quantile ranges and Gini coefficient which also account for the robustness of the results.

During the period 2004-05 to 2018-19 the study found a decline in participation rate among females and less advantaged social groups in both rural and urban areas. However, wages have increased throughout the distribution yet they suffer substantially lower return to earnings. Overall male female wage gap has narrowed down but for casual work it is more or less stagnant. In the year 2018-19 female workers tends to get mere 77 and 68 percent of what their male counterparts receive as regular and casual workers respectively. Not to mention but across social groups this declining male female wage trend is significant only among high caste groups. Nonetheless education deemed to play a crucial role in determining wage of a worker, irrespective of his/her socio-economic background. However, the results uphold this fact suggestive solely for those who have attained secondary level of education

and above. There is considerable evidence of earnings gap between SC, ST, OBC and general category workers, given the same level of education. Further, these socially marginalised workers are found to be occupied at the lower end of the occupational hierarchy, committed to secondary jobs without any social security benefits and thereby acutely exposed to unequal pay.

### **Industry 4.0 and the Changing Employment Relations – A Case of the Indian Information Technology Industry**

**Rohini Pillai**, Research Scholar, Tata Institute of Social Sciences, Mumbai, Maharashtra

**Bino Paul**, Professor, Tata Institute of Social Sciences, Mumbai, Maharashtra

Utilising grounded theory approach, we explore the dynamics of employment relations in the Indian IT industry in the context of digital transformation. The study draws insights from 32 professionals including HR managers, software engineers and senior management representatives currently working in the IT industry in India in small, medium and large firms. Findings indicate that the employment relation in the Indian IT industry is driven by the four forces: 1) Labour Laws 2) Compensation & HR 3) Unions & Organisations 4) Health & Work Place Security. Labour laws need to be updated to suit the requirements of knowledge-based professions. Compensation and HR management styles vary widely due to the disparity and heterogeneity in the nature of work. There is scope for a non-politicised union in the industry. Health and security of IT professionals need attention. The findings suggest the changing concepts of work spaces in IT, increased attention needed in attracting and retaining talent, the rise of independent workers in future. We also caution that the increased outsourcing in HR leads to the dilution of HR in IT.

This study offers the following theoretical contributions. We analyse the nature of employment relations in the IT industry and conceptualise the key factors shaping the employment relation. We contribute to the literature on decent work deficits in the Indian IT industry (Nizami, 2019) (Shamiulla et al., 2020). We argue that decent work deficits vary according to the firm's nature and size, employees' skill level, and the quality and level of education of the employees. Our research adds to the existing literature on convergence divergence paradigm in HRM (Budhwar et al., 2016), the theory that 1) convergence or divergence of HRM is not country-specific but industry-specific and 2) in India, the HRM practices in the IT industry are diverging from the rest of the world. Due to the increased outsourcing of HRM functions, the role of HRM as a principal business function in the IT industry is indeed weakening. We contribute to the discussion on whether the IT industry needs unions. Our research suggests that conventional unions cannot survive in the IT industry. However, there is a possibility of a hybrid system comprising of employers, employees and state representatives, which can help resolve the most of the issues impacting both employees and employers.

## TECHNICAL SESSION 1.11

### **Segregation and Occupational Association: School Education System in India**

**Samyak Jain**, Research Scholar, South Asian University, Delhi.

Education plays a vital role in the society and has been variously theorised. As per the human capital approach, education plays an instrumental role in raising productivity and earnings for an individual in the society. It can also ensure equality in the labour market and income mobility. Education not only plays an instrumental role in enhancing earnings (and reducing exploitation), but also has an intrinsic value that individuals have reason to value. Education is viewed as a dynamic force that can reduce social inequalities and play an important role in positive social transformation.

Education is also positively associated with a decline in fertility, infant mortality, and population growth. However, while the education level has continuously improved in India over the past two decades, it had little effect on the social inequalities. The period of high economic growth saw an improvement in education levels that was accompanied by increased occupational segmentation. While it raises serious questions about the role of education in India, there is a dearth of empirical analysis that rigorously investigates the association between occupational hierarchy and educational segmentation in India. Since the socialisation that the students receive through the means of education affects their future outcomes, it is important to understand how these segmentations in the education sector have interacted with segmentations in the occupational structure in India over the last decade. In this paper, we address this issue, particularly in the context of school education.

Using NSSO surveys for the period of 2007-18, this paper tries to analyse the evolution of association between occupational hierarchy and educational institutions in India. By hypothesising a hierarchy in educational institutions based on the 'quality' of education that they provide, we empirically investigate its association with occupational segmentation and its evolution over the last decade. We find that a significant and positive association exists between them, which has persisted during the last decade. Households that belong to the well-off sections of the society not only spent a considerable amount on school education but also have had higher participation in better-quality educational institutions. Though the expenditure on education by the worse-off sections of the society has increased significantly over the past decade, their participation in better-quality institutions not only remains low, but a considerable proportion of students from these households continue to attend poor-quality institutions. Using a multinomial logit regression, we find that students from the well-off sections not only have a higher likelihood of attending top-quality institutions but also have a lower likelihood of attending low-quality institutions. While those from the worse-off sections have had a lower likelihood of attending top-quality institutions and were increasingly segregated into low-quality institutions. Even after controlling for various socio-economic characteristics, the differences (based

on the occupational position) remain significant and have been persistent over the last decade. The segmented accessibility of school education in India for the disadvantaged sections has constrained their future opportunities and outcomes and raises serious questions about the theoretical aims of education.

### **Incidence of Trade Liberalization on Employment and Advent of Structural Transformation: Challenges across Various Sectors and Groups in The Indian Economy**

**Pallabi Mukherjee**, Assistant Professor, IPS Academy, IBMR, Indore, Madhya Pradesh

**Kanhaiya Ahuja**, Professor & Head, School of Economics, Devi Ahilya University, Indore, Madhya Pradesh

Around 90% of India's employees are informally working and are unprotected by laws. Low-wage and low-productivity informal work have persisted over time. Along with this, there has been a delayed process of structural transformation. The country has undergone trade liberalisation since 1991, which was/is likely to improve the nation's wellbeing if it could also generate long-term employment. However, it could not do much for the employment scenario.

This study evaluates the impact of trade liberalisation, more specifically trade openness, on employment (in the organised sector) and also the differences in employment across male and female workers, urban and rural workers, and workers across different sectors. We have used the dummy regression model incorporating interaction model to assess the impact. There exists structural change in employment. If we consider the interaction between the dummy and independent variable (trade openness), after the structural change, employment in terms of differential slope has augmented with slower or reduced rate. Again, the differential mean is positive but less than the overall change in mean, once again depicting a slower or reduced transformation. The study also explores change across groups: male and female; urban and rural; and sectors with the help of Analysis of Variance. There exists a significant change in the employment scenario in the country after the liberalisation period.

Employment in the public sector has decreased by 8% and employment in the organised private sector has increased by approximately 53%. Employment of female workers has increased over time, yet there are significant differences between female and male employees. Employment in the primary sector has decreased and that in secondary and tertiary sector has increased, majorly due to the liberalisation and globalisation policies and also due to the increase in the service sector

## **Economic Vulnerability of Women in North-East India: A Challenge for Employment in the Informal Sector**

**Nilam Adhyapak**, Ph.D. Research Scholar, North-Eastern Hill University, Shillong, Meghalaya

**Mhadeno Odyuo**, Ph.D. Research Scholar, North-Eastern Hill University, Shillong, Meghalaya

The informal sector is not a homogenous entity; rather, it is a diverse part of an economy where substantial transaction of goods and services takes place. It is also a large contributor of employment opportunities for those who may lack the education and/or skills to be employed in the formal sector. Many economists over the decades have assumed the gradual absorption of the informal sector within the ambit of the formal sector. However, as is evident from the empirical studies of most of the developing countries, informal sector continues to thrive and provide a vital channel of economic output for these countries. The informal sector workers despite being dominant in number are unfortunately not offered the same benefits and protection as the formal sector workers. On account of being outside the purview of most of the governmental regulations, they also have a hard time claiming protection of their rights as workers. This in turn increases their economic vulnerability as they are unable to acquire a secure source of income and employment. With these considerations in mind, the focus of this paper is especially on women engaged in the informal sector as they fall into the most marginalised section of the society and are more vulnerable than their counterparts in the formal sector. Added to that, on account of being perceived as the weaker sex, the women in the informal sector are also subjected to discrimination and harassment. As a matter of fact, these women are generally confined to the low earning and low productivity activities in the informal sector. As a result, they have little scope of moving ahead in the economic ladder. Their situation has been worsened by the Covid-19 pandemic and the subsequent lockdowns which has further exacerbated their vulnerabilities.

Our study explores four categories of the informal sector employment where women are predominantly engaged in: garment work, construction work, street vending and sex work. These groups of employment have been chosen so as to give a broader representation to the women workers, given the heterogeneity of the informal sector. Each of these activities unfolds the innate vulnerabilities the women face, the struggle for a decent employment and their collective challenges deepened by the Covid-19 crisis. The paper attempts to shed light to these issues by keeping two specific objectives. Firstly, to construct an economic vulnerability index through the lens of both employment and income vulnerability. The assessment of vulnerability by considering both employment and income parameters provides an overview of their increased susceptibility and barriers that they have to overcome to ensure a safe and secure workspace. The second objective draws results from the analysis to understand the extent of vulnerability the women workers face across the groups. Our samples have been drawn from two understudied regions of North-East India-Guwahati and Dimapur in Assam and Nagaland, respectively. From a limited primary survey, we were able to carry out informal interviews of 100 women workers engaged in these activities. The findings from the study bring out certain key areas that need to be addressed. The extent of vulnerability was observed to be different across the groups, in

terms of both employment and income parameters in the economic vulnerability index which entails how any kind of measure or focused effort depends on which form of employment we are targeting at. Clearly, recognising their inherent vulnerabilities and addressing them separately can be one of the channels to expand their limited opportunities.

### **Defeminization of the Labour Force: A Case of Nagaland**

**Apang Jungba**, Research Scholar, Lovely Professional University, Phagwara, Punjab

**Tanima Dutta**, Associate Professor, Lovely Professional University, Phagwara, Punjab

**Pangjungkala Longchar**, Research Scholar, Lovely Professional University, Phagwara, Punjab

Creation of employment opportunities is the biggest challenge and opportunity for all the Governments across the globe. Coupled with this is to have gender parity, as has been stated by MDG and SDG. Unfortunately, in India there has been a seamless defeminisation of labour as seen from various NSSO reports. Nagaland with a very high female literacy rate and highest unemployment rate as per the latest PLFS report becomes a very interesting study area. There is paucity of literature as far as Nagaland economy is concerned and studies on labour are difficult to come by. This paper is an attempt to look into the defeminisation of the Nagaland workforce. As most of the research on employment shows, there is relationship between education and employment. Our paper attempts to establish a relationship between education and female labour force participation in the economy. The objectives of the paper are to describe the data on LFPR, WPR and UR in terms of gender, to analyse sectoral employment in the state in terms of gender and to evaluate the impact of age household size, number of schooling years and vocational training on WPR. The last objective is to estimate a model to show the relationship between WPR and Education. We have used the unit level data from the PLFS for all the three years published so far.

The total sample size of the NSSO survey in Nagaland for the year 2018-19 is 4,203 and that of females 2,039. LFPR and WPR data have been taken to look into the employment status along with the unemployment rate (UR). The weekly status data have not been considered. The Binary Logit model has been used to estimate the causality between WPR and other factors relating to education, age, household type and the number of schooling years, and vocational education. The Logit model has been used because the predicted variable (WPR) is a categorical variable.

### **Contours of Structural Change in Growth and Employment in Bihar**

**Shruti Priya**, Assistant Professor, Gaya College, Gaya, Bihar

The state of Bihar has failed to generate employment commensurate with the output growth over the past one and half decades between 2004-05 and 2017-18. The economy of Bihar has undergone structural change with declining share of agriculture and allied activities in total output on one hand, while the tertiary sector has been gaining momentum on the other. However, the changing shares of sectoral output have not been matched adequately by corresponding change in employment shares. To

make matters worse the state has witnessed contraction of employment in the agriculture sector that has been only partially compensated by non-agriculture. Moreover, job creation beyond agriculture is largely informal. The manufacturing sector has not kept pace and failed to generate productive employment for all. The state of informalisation in the non-agriculture sector bears testimony to the fact that the labourers in the state have low skills and low productivity. Construction being low skill-based activity has generated employment for those leaving agriculture. But employment growth in tertiary sector has not been in tandem with the increase in its contribution to the Gross State Domestic Product. Based on secondary data, the present paper dwells into the trends and pattern of employment in Bihar. Exploring the structural change, the paper digs deeper into the sectoral shares and changes therein both in terms of output and employment.

### **Unpaid Domestic and Care Work as A constraint Towards Women's Employment Opportunities: Empirical Evidence from India**

**Dakrushi Sahu**, Senior Research Fellow (Ph.D.), Jawaharlal Nehru University, New Delhi

Entire human activities could be divided into two parts: work for social reproduction and work of economic production. Whereas the first one is considered to be the women's work, the second one to be the men's work. Women's work (reproductive activities), seen as a subordinated form of activities in the capitalist economy, is believed to be rewarded in the coin of so-called "love" and "virtues"; on the other hand, men's work (economic activities) is remunerated in the coin of "money". Women's reproductive work has been relegated into the domestic sphere thereby making their (women's) activities concealed from social importance. It has been argued often that labour force participation of Indian women has been declining since 1987-88, only with an anomaly in 2004-05. Such a declining trend of female labour force participation has been explained extensively with many socio-economic factors. But one of the crucial factors, i.e., the increasing participation and time utilisation of Indian women in domestic activities (reproductive activities), was not paid adequate attention in the literature. This was mainly because of not having comprehensive time-use data for India. The Indian Time-Use Survey 2019 (ITUS-2019) is quite a comprehensive one that enabled us to empirically verify such nexuses.

The study aims at exploring the dichotomy between unpaid domestic and care work and the precarity of women's employment prospects in contemporary India. The issue at hand has been paid scant attention in the literature despite its phenomenal repercussions. The study suggests that women's unpaid care work has largely been neglected and not paid much heed to owing to the deep-rooted patriarchal notion. The negligence in the market economy has made women, fuelled by capitalist ideas, deprived of entering into the paid labour market. The latest large-scale time use survey conducted by NSSO has enabled us to observe that women's work has largely been limited by their household chores putting constraints in choices over the paid labour market options.

## **COVID Induced Challenges on Rural Livelihood Dependent on Educational Institutions: Case Studies of McCluskiegunj, Jharkhand**

**Kanaya Mahanti**, Research Scholar, Central University of Jharkhand, Ranchi, Jharkhand

**Nitesh Bhatia**, Assistant Professor, Central University of Jharkhand, Ranchi, Jharkhand

The current paper is about McCluskiegunj, the only Anglo-Indian village in India housing 350 Anglo-Indian families since 1930s established by Mr. Ernest Timothy McCluskie. Years later the next generation of the settled Anglo-Indian families in McCluskiegunj started migrating to foreign lands in search of livelihoods. It was then understood by an Anglo-Indian couple, Mr. Alfred Rozario and Ms. Dorothy Rozario to generate sources of sustainable livelihood and retain the dreams of Mr. E.T. McCluskie.

In order to address the educational and livelihood challenges, in the year 1996 Don Bosco Academy, the first and only CISCE School was established in McCluskiegunj. The school caters to thousands of students along with two CBSE schools established in the 21<sup>st</sup> century. Don Bosco Academy serves 80% of the students residing in the hostels of McCluskiegunj. The hostels operating in McCluskiegunj provide employment opportunities to non-Anglo-Indian families as well by providing them the opportunities to render their services and generate a source of livelihood.

The COVID-19 pandemic induced challenges in the life and livelihoods of every individual. However, the COVID-19 led to a nationwide lockdown, which generated a huge impact on the students and the people who were solely dependent on the educational institutions for their livelihood. Where other sectors of the economy that received some or the other relaxations, the schools underwent closure for 23 months. One of the major sources of livelihood of the residents of McCluskiegunj depends on the operation of schools, particularly Don Bosco Academy.

This research paper has been drafted with an intention to unveil the challenges faced by the rural people of McCluskiegunj, whose sole livelihood depends on the operation of educational institutions. The method used for conducting the research is a semi-structured interview and case study method from four categories of respondents, namely, the cook, the tiffin boy, the washer-men and the confectioners. A total of four case studies with one from each category of respondents including the basic details, the situation during the normal period and the new normal period, followed with a summary of challenges faced by each category of respondents (thirty cooks, seven tiffin boys, five washer men and fifteen confectioners) is mentioned in this study.

The common and the major challenges faced by the individuals employed by the hostel owners (the cooks and the tiffin-boys) and the self-employed (the washer-men and the confectioners) stated that, there has been no income since last 23 months as the hostels were closed since March, 2020 and the lack of earnings for such a long period of time have led to reduction in quantity and quality of food intake, reduction in household expenses and hindrances in managing education and medical expenses of the family members. The washer-men witnessed a fall of 95% of their earnings and the confectioners have been facing challenges to keep their business running and supporting the employees employed under them.

A brief information about Meena Devi (the cook) states that the COVID pandemic has created a multidimensional impact on the live and livelihood of rural individuals and families, solely dependent on educational institutions.

A brief information about Suresh Kumar (the tiffin boy) clearly states that working as a tiffin boy fetched him sufficient money to eat three meals a day and save the surplus in the Grameen Bank. It has helped him to come out of the drudgery his father has imposed on him, since his childhood. Hari Rajak (the washer-man) states that his own challenges of managing household expenses have led him to take up an alternative temporary source of livelihood. With only 5% of his monthly income has depleted almost all the savings he had. His family has eliminated non-veg food from their diet and restricted their food consumption to rice and vegetable curry. Poonam Kumar (the confectioner) states that his decent source of livelihood has come to a standstill since the last 23 months. As the canteen operator at Don Bosco Academy and a confectioner, he managed to earn sufficiently to support his joint family and educate his children in the CISCE school of McCluskiegunj. But the reduced sales to Rs. 200 to Rs. 500 a day have led to many difficulties in Poonam and his families lives. He states that if this remains the situations, the family might have to restrict themselves to consume one meal a day.

To conclude, the individuals and family, solely dependent upon the educational institutions, have been worst hit due to the closure of schools since last 23 months. It has impacted them in terms of employment, food security, depletion of savings and increase in debts. Though the Government has provided them aid by providing free rations, it has not proved to be sufficient to serve the families impacted for such a longer duration. COVID-19 pandemic has induced challenges with difficulties to overcome on employment, rural livelihood, food security etc. along with after-effects to be managed.

**Determinants of Female Labour Force Participation in India:  
Evidence from PLFS Data**

**Varsha Gupta**, Ph.D. Research Student, Jawaharlal Nehru University, New Delhi.

Female labour force participation has gone down from 42.74 percent in 2005 to 24.53 percent in 2019 in India. This is the case when education levels have gone up and the fertility rate has declined. In this backdrop, this paper studies the low figures of female employment in India. It draws out the determinants of female labour force participation (LFP) during 2005 to 2019 using NSS, EUS and PLFS data. With the use of a Probit, Shapley-value decomposition and IV-Probit methods, the various supply side factors which aid or impede female LFP (FLFP) are brought out.

The predicted probability of FLFP (simple Probit) has gone down from 18.77 percent in 2005 to 7.4 percent in 2019 in rural areas, while in urban areas it has declined from 9.32 percent to 6.3 percent. The Shapley Value decomposition shows that age and education levels of women together explain 37 percent of the variation in rural areas and 51 percent in urban areas in 2019. Education's contribution to FLFP is the highest in urban areas at 20 percent in 2019. State level heterogeneity, an indicator of labour demand, also explains about one-fourth of the total variation in female LFP.

Further, regression with the use of IV-Probit model, to counter the potential endogeneity of household monthly consumption expenditure, reveals presence of negative income effect in 2019. Being married, presence of children and staying in a large household reduces the probability of FLFP. The occupational structure of the household is also a significant factor. The probability of participation rises when a woman belongs to a regular salaried household, vis-à-vis the self-employed. Education levels of secondary school and above are significant and positively associated with FLFP. There is also a caste pattern visible with higher probability of participation among the scheduled tribes and scheduled castes vis-à-vis other castes.

Higher education has a stronger positive effect in urban areas on FLFP while household income, presence of children and being married have a stronger negative effect on rural FLFP. The variation by caste presents effect of social norms though its significance has reduced over the years. Inter-temporal analysis presents that the effect of children and household income levels has reduced over time, however that has not translated to higher probability of FLFP. This is an indication of demand side issues in FLFP in India.

## **The Labour Code and its Perceived Impacts: From the View Point of the Employer**

**Shirin Akhter**, Associate Professor, Zakir Husain Delhi College, University of Delhi, Delhi

The labour code on wages obtained the nod of the President of India on August 8, 2019, following which the Ministry of Law and Justice. The code is expected to regulate wage and bonus payments in the organised and un-organised sectors irrespective of their wage ceiling and type of employment. This law enforces the provisions of minimum wages and timely payment of wages across sectors and it is expected that this code will make it easier for employers, both in the organised and the unorganised sectors, to understand and comply with the code. The code has created much furore in its wake, attracting different types of reactions from workers, employers, economists and policymakers.

While the labour market awaits implementation of the code, we seek to analyse the employer's perceptions regarding this code. This paper is a perceptions-based study that includes a detailed study of the labour code and presents findings from a survey of 50 employers employing 1960 workers. We had focused discussions with these employers based in Delhi-NCR. These employers cut across the organised and unorganised sectors. We try to analyse the employer's perceived impact of various provisions of the labour code on wages and employment of workers and the effects of this code on productivity of the firm and workers employed therein.

With regard to wages 86 percent employers interviewed expect payment of wages to get more regulated across sectors, as the unorganised sector will also have to comply, which might further worsen the existing unemployment problem in India. Further, many employers feel that stringency with regards to hiring and firing will hurt small enterprises more than the large ones, making it difficult for small businesses to recover from the twin shocks of demonisation and the pandemic, 96 percent of the respondents in our sample fear that this provision will slow down the pace of economic recovery and decrease the rate of growth for the economy.

Regarding the employment of transgenders, we feel that our socio-economic structure has a long way to go before we see any kind of gender equity. The paper calls for a two-pronged affirmative action on this front that ensures free and fair education and employment to transgenders. Unless employment is assured, other policies will make no impact. With regards to workers and employees putting in more effort leading to an increase in productivity as a result of provisions of this code, there is nothing concrete that can be said. Forty-six percent of employers questioned feel that the code would increase productivity per worker while 54 percent expect no impact on the worker productivity. Sixty-two percent respondents expect overall productivity to rise increase as a result of shift of employment from labour to capital. 88 percent employers feel that this code will do nothing so far as formation of skills is concerned. Neither is there anything in addition to what already exists in context of gender bias, which is good on paper but is grossly insignificant in practice. The pre-pandemic labour force participation of women in labour force was reported at 18 percent by the PLFS 2018-19 as against 55.5 percent of men. Ninety percent of the employers we talked with, feel that this code does not go beyond the Equal Remuneration Act and there is nothing that would ensure a better compliance.

We feel that this code is more of a consolidation of laws that retains most of the substantive provisions of the earlier laws. Though the code has been able to zero-in on a singular definition for the wage, it has not been able to reduce the complications in the structuring of wages. There is nothing in the code that could take the economy around the problems of increasing unemployment or decreasing skill levels. Neither have we been able to point to any affirmative action that has been taken to reduce the gender and other biases. None the less, since this code is expected to impact livelihoods of 50-crore workers, we hope that this code works for the good of all these people.

### **Assessing the Magnitude of Youth Employment across Industries in Neo-liberal India**

**Nitin Bisht**, Research Scholar, Indian Institute of Technology Roorkee, Roorkee, Uttarakhand

**Falguni Pattanaik**, Associate Professor, Indian Institute of Technology Roorkee, Uttarakhand

The higher the populace of the younger generation, the brighter are the prospects for a nation to develop. However, the significant representation of the younger population reflects a dichotomy in India. On one side, youth represents a wide array of potentialities for the economy to prosper. While on the other hand, the growing share of the youth population marks a challenge for the economy to create and provide ample and equitable opportunities for their growth and development—employment and education being few of them. Therefore, Sustainable Development Goals (SDGs), 2030 identifies youth as the ‘key agents of change’ (Bisht & Pattanaik, 2020) and henceforth emphasizes on their active participation in the pathway of a nation’s development. Goal 4; target 4.4 calls for skilling the youth with market-oriented training. While Goal 8; target 8.5 realizes the need for full and productive employment, especially for the female youth. These youth-centric goals remain highly significant in the case of Indian youth, who constitute the highest proportion of the population. However, despite being a potential labour force, youth remains the least focussed section of the labour market, especially in developing countries (O’Higgins, 2003). India not being an exception. During the last three decades, youth labour market in India has gone through notifying structural changes. Henceforth, this study attempts to address the transition of youth in the Indian labour market by identifying the relative contribution of socio-economic characteristics in defining youth employment in the manufacturing sector. The study finds a lower probability of employment among youth in the manufacturing sector with the demographic characteristics of age group 25-29, gender female, rural sector and central region; displaying the education attainment graduation & above, no technical education and no vocational training. At the same time, the socio-economic characteristics of youth with a lower likelihood of employment in the manufacturing sector includes the younger populace of the others religion and the STs, along with the youth hailing from a household whose occupation is self-employment and the household possessing the land lesser than 0.04 hectares.

## **Examining New Trends in Organised Manufacturing Sector through Employment Elasticities**

**Sangeeta Ghosh**, Assistant Professor, Institute for Studies in Industrial Development, New Delhi

Until around a decade ago the organised manufacturing sector in India has been seen as mostly stagnant in terms of employment creation. However, evidence from the Annual Survey of Industries reveals that the pattern of employment growth from the mid-2000s onwards has been very different from the pattern observed during the 1980s and 1990s. The organised component that has been increasing sharply even as share of the unorganised sector employment has shrunk. As a result, the share of the organised sector in total manufacturing employment, which was stagnant at around 18 percent had shot up to 27.5 percent by 2015. This study examines this new phenomenon in the organised manufacturing sector, with the elasticity of employment with respect to output turning more than 0.5 for many of the 55 3-digit sectors under study. We comment on the loci of new employment growth, and its relations to labour intensities and wage growth. The employment growth however, is seen to be mainly on account of contractual workers, with over 40% of the new employment being that of contract workers. This means intensified trends towards increasing informalisation in the organised manufacturing sector, a sector that otherwise has the potential to offer better and more decent employment conditions. The creation of new employment is not seen to be in contradiction to increased labour intensities, across all sectors, including low technology intensive sectors, even as labour intensities seemed to have reached a floor in recent years. Interestingly our study finds no relation between technology intensive sectors and labour intensities. It is in fact seen that many low technology sectors show high capital intensities and higher technology intensive industries show greater use of contractual labour. Examining employment elasticities and wage growth rates, we find that recent years of organised manufacturing have seen sectors that have been seeing positive employment elasticities and wage growth, unlike the previous decades.

## **Employment Structure and Occupational Dynamics in Bihar: An Evidence from Labour Force Survey, 1993-2017**

**Dhananjay Kumar**, Research Scholar, University of Hyderabad, Hyderabad, Telangana

**Subhash Chandra**, Research Scholar, University of Hyderabad, Telangana

This paper is to understand the dynamics of the employment status in the labour markets in the process of structural change and economic growth in Bihar over the periods of 1993-94 and 2017-18. The employment status of an individual has been analysed across the industrial and occupational classifications. We have used the labour force survey data of five rounds since 1993-94, and estimated marginal effects after utilising the multinomial logistic regression for empirical estimation. The analysis shows significant changes in the employment patterns across the industrial and occupational classifications over the periods. Major changes in the employment structure were observed between 2004-05 and 2017-18. The workforce in the primary sector had declined by 35.53 percentage points,

in which about eighty percent of the workforce declined between 2004-05 and 2017-18. The decline of the workforce share in primary sector was absorbed into secondary and tertiary sector in 57:43 ratio. A further disaggregated analysis revealed that the maximum workforce was absorbed in the construction sector, followed by trade and hotel services. Interestingly, the employment share in the services sector had declined for male in the urban regions in contrast to a significant rise in rural regions. On the other hand, the impact of female employment can be observed as the rise in tertiary sector employment in both regions compared to the decline in primary sector employment. However, gazing over the workforce participation by occupational classification, it revealed that the decline of the workforce in primary sector was due to withdrawal of casual wage labourers in the sectors rather than the experienced ones. However, the structural change analysis suggests the movement of the workforce from low to high productive sector and, lastly, the empirical estimation suggests a significant impact of the socio-economic factors in the change in the workforce patterns.

### **Labour Force Participation of Married Women in Urban India: A Cross Sectional Analysis**

**Jyoti Thakur**, Ph.D. Student, Institute for Social and Economic Change, Bengaluru, Karnataka

The labour force participation of women in urban India has remained stagnated at around 18% since the 1980s. Against the conventional understanding, significant progress in female education, extraordinary reductions in fertility rates, and great economic growth has not led to improvement of labour force participation among women in India. This paper attempts to provide an insight into the complex nature of labour force participation of women in urban India. Using unit level data of NSS quinquennial rounds and the PLFS, the paper analyses the labour force participation of urban married women: firstly, the gender gaps in urban labour markets and changes over a period of time; secondly, trends and patterns of married women's labour force participation from 2004-05 to 2018-18; thirdly, a cross-examination across age, level of education, occupation, work status; and lastly, the paper investigates the activity engagement of out of labour force women belonging to different education levels.

### **Subcontracting in India's Organised and Unorganised Manufacturing Sector: Some Explorations**

**Nancy Yadav**, Ph.D. Student, Jawaharlal Nehru University, New Delhi

This research note is a preliminary exploration of subcontracting in India's organised and unorganised manufacturing sectors for the periods 2005-06 and 2015-16. It provides evidence of the prevalence and intensity of different forms of subcontracting in the manufacturing sector, including both intra-sector and inter-sector contracting in organised and unorganised manufacturing sectors. The evidence suggests that the organised sector contracts out work within the sector and to the unorganised sector as well; the unorganised sector is found to be the recipient of contract work from organised sector but

does not contract out any significant amount of work either to the organised or to the unorganised sector, which is expected given the lack of resources with the unorganised manufacturing.

The organised sector contracts work to the unorganised sector depending on its needs. It contracted out labour-intensive work in which only a part of the product needs to be prepared mostly to home-based workers, a large proportion of whom are women from lower socio-economic status. In some sectors these contracted home-based workers far outnumbered the workers directly employed in formal factories and their earnings were much lower than the wages earned by the factory workers. So, subcontracting has enabled formal factories to access the pool of cheap labour in the unorganised manufacturing sectors. The economic logic of contracting out to home-based workers is reduction of costs and management of other issues related to labour like labour unionisation, occupational hazard. On the other hand, the work of making the complete product was contracted out to establishments which had relatively higher capital than average establishments in the unorganised sector and therefore could be trusted for supplying the complete product.

## **TECHNICAL SESSION 1.13**

### **Is Gender a Barrier to Access Vocational Training in India?**

**Sayanti Roy**, Ph. D. Scholar, Women's Studies Research Centre, University of Calcutta, Kolkata,  
West Bengal

**Montu Bose**, Assistant Professor, TERI School of Advanced Studies, New Delhi

**Arijita Dutta**, Head of the Department, Department of Economics, University of Calcutta,  
West Bengal

Knowledge and skill have become critically important, given the increasing pace of globalisation and technological changes that are taking place in the world. Countries with higher and better levels of knowledge and skills respond more effectively and promptly to challenges and opportunities of globalisation. The economy becomes more fecund and competitive in the presence of skilled human capital. India is at the verge of transform to be a knowledge-based economy and its competitive edge will be determined by the abilities of its people to create, share and use knowledge more effectively. Vocational Education and Training (VET) is an important vehicle of skill development. VET refers to education and training which provides knowledge and skill for employment. It is recognised to be a crucial tool for social equality, inclusion and sustainable development. Skilling the working-age population has been prioritised recently in India. But lack of education is hindering the effort. In case of women population, the situation is even worse, in spite of direct government intervention. Even if the women get access to VET, the options available to them are limited and gender-stereotyped. The present paper tries to shade light on the access to vocational training of women vis-à-vis men in India and explore whether gender works as an obstacle for accessing vocational training in India and an Eastern state, namely West Bengal.

### **Barriers to Employment for Persons with Disability: A Case Study of Patna District of Bihar**

**Baikunth Roy**, Assistant Professor, College of Commerce, Arts and Science, Patliputra University,  
Patna, Bihar

In India, disaggregated data on disability: on its prevalence, participation and barriers, are inadequately available. Besides, methods of data collection and disability estimates are often debated. The present study makes an attempt to understand barriers to employment for people with disabilities by employing qualitative methods in Patna district of Bihar. The findings of the study suggest that reducing physical barriers, psychological barriers and information and communication technological barriers will help promote creation of gainful employment among the disabled communities. Therefore, a multifaceted approach is required to address the social, medical and legal aspects of barriers to participation in the labour market. Evidence from this study may help in planning need-based employment for people with disabilities.

## **Saving Shift among Young Workforce during Pandemic**

**Nidhi Sharma**, Professor, Banaras Hindu University, Varanasi, Uttar Pradesh

**Pradeep Singh**, Assistant Professor, SMRD (PG) College, Bhurkura, Ghazipur, Uttar Pradesh

Throughout the life cycle a person faces several types of risk such as loss of income, loss of employment, pandemic, poor health, unexpected consumption expenditure, worse education conditions, recession or inflation in national economy. Uncertainty also makes households more reluctant to consume today for fear of creating a habit stock because it would be difficult to maintain it tomorrow's bad income shock. Among young households, those who expect faster income growth seem to save more than those expecting slower income growth.

The Corona pandemic has transformed the nature and quantum of human activities. Thus, in crisis time, when income of young workforce falls, fixed consumption expenditure remains the same, there is fall in majority of variable consumption expenditure, but there is rise in some variable consumption expenditure and consequently savings fall. Fall in savings is mainly caused by outdoor expenditure change, home furnishing expenditure change and other amenities expenditure change. Young female workforce, working and earning independently have faced the pandemic time with patience, without changing their work places. It is the online local delivery system and online marketing system that proved the lifeline for the young workforce doing jobs in places, quite far away from their native places. Females are relatively thrifty and use resources in a better manner. At time of crisis, savings are the buffers for meeting out the consumption. Young workforce must be encouraged to develop a habit of saving, so as to face such type of situation in future. This paper deploys a Multinomial LOGIT Model (MLM) with different explanatory variables for explaining the savings behaviour.

## **Impact of Trade Liberalisation on Wage Inequality and Skill Formation: A Theoretical Analysis**

**Niladri Saha**, Research Scholar, Visva-Bharati University, Santi Niketan, Kolkata, West Bengal

**Priya Brata Dutta**, Assistant Professor, Visva-Bharati University, Santi Niketan, Kolkata, West Bengal

Differences in skills among workers (skilled-unskilled labour), existence of wage inequality, skill formation, unemployment (or wage gaps) due to differences in skills, are some important issues in the literature on trade and labour economics. Thus, there exist increasing wage inequality in the economy. This increasing income inequality was found in the US between 1960s and 1970s and in European countries between 1978 and 1988. We find a similar picture in many developing countries because the wage inequality problem has worsened in many Latin American and South Asian countries since the mid-1980s. However, the experience of East Asian countries between 1960s and 1970s goes in favour of the conventional theory that a greater openness to international trade tends to narrow the skilled-unskilled wage gap. Different studies point out different reasons for this increase in income inequality. Trade liberalisation and technological progress are the main two controversial reasons

of this phenomenon. Many empirical studies point out other causes of this growing inequality like international outsourcing, increase in the price of skill-intensive goods, entry of labour-surplus low/middle-income countries like Bangladesh, China, India, Indonesia, and Pakistan in the global market, etc. There exists a lot of theoretical works dealing with the issue of this growing wage inequality. They adopt the framework of static competitive general equilibrium models of small open economies in which there exist two different types of labour- skilled and unskilled.

In this paper, we consider a small open economy to show the effects of change in different parameters on wage inequality and skill formation in the economy. We develop a static general equilibrium model suitable to less developed or developing economies, where the agricultural sector uses two specific factors, while manufacturing and skill formation use two mobile factors. Skill formation takes place instantaneously in our model. Factor endowments are fixed in this static model. We have tried to show an economy similar to the LDCs and DCs, where skilled-unskilled wage gap already exists. Due to change in prices of the final goods of any sector or due to capital inflow or outflow, wage rates change along with the skill formation in the economy. We have shown these effects along with the necessary conditions. Further, we have extended our model, where there are only three factors and three sectors. In the extended model, capital is mobile between all the three sectors. Other assumptions remain the same. In this extended model, we went through same procedure to find out the effect of change in parameters on wage inequality and skill formation. We might assume skill formation sector as the education sector. Skill could then be assumed as education. We strongly feel that an education sector is needed in the economy for development.

### **Does Participation in Global Value Chains Leads to Structural Transformation?**

**Kumar Rohit**, Ph.D. Scholar, South Asian University, New Delhi

Developing economies are characterised by high inter- and intra-productivity gaps between different sectors of the economy. Rapid episodes of economic growth are supposed to speed up the process of structural transformation in these economies via a continuous reallocation of labour from relatively low productive sectors to more productive sectors. Expansion of the modern sectors and global economic integration were expected to play an important role in fostering the process of structural transformation in surplus labour economies. However, experience of much of the underdeveloped and developing economies shows that despite decades of rapid economic growth and global economic integration, a substantial portion of their labour force is still engaged in low productive sectors like agriculture and informal economic activities. Although, the share of agriculture in value added and employment in these economies has experienced a relative decline over time, labour has moved disproportionately towards the service sectors, which might not have the same potential for boosting aggregate economy-wide labour productivity. GVC optimists are of the opinion that participation in GVC-related trade can play an important role not only in boosting economy-wide labour productivity but also in fostering the process of structural transformation by pulling out labour from less productive

sectors towards more productive sectors in developing economies. However, there is a dearth of empirical evidence exploring the nexus between GVC participation and structural transformation in developing economies. Exploratory analysis of forty countries during 1990-2015 from Asia, Africa and Latin America in this paper shows that GVC participation might be playing a role in the reallocation of labour from sectors with low productivity levels towards sectors with high productivity levels. Patterns of structural transformation in these regions show that although labour has moved towards sectors with high productivity levels, most of the sectors witnessing increased concentration of labour have experienced low or decreasing productivity growth. The disproportionate share of labour towards services sector and the prevalence of informal sector in both industrial and service sectors might be a plausible reason for this. The growing linkages of the domestic informal economy with GVCs also hints towards a potential role of GVCs in driving the negative dynamic component of structural change in the underdeveloped and developing countries. Including the formal and informal dichotomy in the sectoral reallocation of labour, and their integration with GVCs might provide better understanding of the nexus between GVC participation and patterns of structural transformation in the underdeveloped and developing countries.

### **Prenatal Sex Detection Technology and Mothers' Labour Supply in India**

**Isha Gupta**, Post-doctoral Fellow, University of Padova, Italy, Padova, Veneto E-, Italy

**Marco Bertoni**, Associate Professor, University of Padova, Italy

**Guglielmo Weber**, Professor, University of Padova, Italy

In this paper we estimate the causal effect of prenatal sex detection technology (PSDT) on mothers' labour supply in India. The advent of prenatal sex diagnostic technology (PSDT) in India has made it easier for women to identify the sex of children before their birth, giving them an option to attain their desired sex composition of children without having to undergo repeated pregnancies. Following the waves of economic liberalisation in the 1980s and 1990s, there was a supply-driven change in the availability of ultrasound technology. In the mid-1990s, large-scale domestic production of ultrasound scanners resulted in a marked increase in the availability of PSDT. In this paper, we use a triple-differences estimator to investigate the impact of this technology on mothers' labour supply. Our strategy combines supply-driven changes in ultrasound availability over time with plausibly exogenous family-level variation in the incentive to sex-select, captured by the gender of first-born child which is shown to be as good as random, and son preference at the local level, captured by the regional level sex ratio in 1980 (i.e., before the availability of PSDT). This triple difference is expected to eliminate the differences in level and trends of mothers' labour supply with respect to the gender of firstborns and thus, give us the causal effect. We find that PSDT had a significant negative impact on mothers' labour supply. We further investigate various underlying channels linking prenatal sex selection and mothers' labour supply and identify two important channels: changes in fertility behaviour and increased investment in firstborn girls. We also find that the availability of PSDT mostly dampened the labour supply of illiterate mothers, mothers from poor, rural, and Hindu households- consistent

with the hypothesis that labour force participation of poorly educated women and women from poor households is driven by necessity. With fewer unwanted daughters after the availability of ultrasound scans and decreased need to continue childbearing to attain desired sex composition of children resulting in exceeding of intended fertility, mothers' financial necessity to work reduces.

## **Calculation of Effect of COVID-19 on Employment Condition in Jharkhand**

**Bharti Kumari**, PhD Scholar, IIT Delhi, Delhi

**Rajat Yadav**, PhD Scholar, Gokhale Institute of Politics and Economics, Pune, Maharashtra

This paper attempts to understand the effect of the COVID-19 shock on the labour market in Jharkhand by examining the vulnerabilities of the workforce using data, mainly from the Periodic Labour Force Survey (2017-18), CMIE's Pyramid Household Survey, and the Census of 2011. Only 23.41 % of the workforce of the state is occupied in Regular Salaried occupations which offer them security of employment and salary. A very small proportion of these workers has a composed activity contract of more than three years and has access to social security benefits and government managed savings benefits. Thus, a lopsidedly huge portion of the workforce is confronting occupation and income misfortunes as an outcome of the pandemic and lockdown. Further, we look at the disparity in Urban and Rural Jharkhand and have discussed, particularly the vulnerability of women. Women have experienced a very low Labour Force Participation Rate, which is likely to be caused by the factors like their participation as mostly unrecognised family labour in household-based production, their responsibility in the care economy, culture norms prohibiting them to engage in work outside homes, less scholastic attainment, less availability of job, etc. To look at the trends and patterns in LFPR and unemployment rate we used Consumer Pyramid Household Survey developed by the CMIE and found out that there is great incidence of unemployment (particularly at the age group of 19-29 among both men and women) in Jharkhand, which kept on increasing after the lockdown and peaked in May 2020. We have classified industries (utilising NIC 2008) as Priority or Non-Priority, as indicated by the MHA rules during Lockdown and then attempted to quantify potential shock in the labour market utilising PLFS 2017-18 and altering the total figures by a multiplier which is determined utilising the projected population from the Census of 2011. Our finding suggests that that we are likely to see increasing inequality in India's labour markets: between workers who have a steady source of income and those not, those having some degree of social security and those not, and workers engaged in sectors that are more amenable to shifting their activities online and those not.

## Effect of De-agrarianisation at the Household Level on the Scale and Nature of Women's Work in Rural India

**Sapna Goel**, Research Scholar, South Asian University, New Delhi

Women in rural India are largely concentrated in agriculture. Most women workers are either working as unpaid labour on their family farms or are landless workers working for wages on others' farms. However, in the recent years, we see de-Agrarianisation at the household level in terms of a decrease in the proportion of households who earn their primary incomes from agriculture as well as the withdrawal of women from agriculture. These patterns have mostly been examined while studying the mechanisation of agriculture. In the larger history of development, reallocation of resources from agricultural to other productive sectors is usual, although the exact mechanics have varied across time and space, based on the context.

In this paper, we use the India Human Development Survey (IHDS 2004/05 & IHDS 2011-12), the only available pan-India panel data set to first map the change in female workforce participation outcomes as the households undergo de-Agrarianisation, focusing on alternative trajectories of women either moving out of the workforce or transitioning to non-agrarian occupations. Second, using a Probit regression framework, the paper analyses the effect of de-Agrarianisation at the household level on the likelihood of a woman staying in the workforce. We find that a substantial proportion of women have transitioned across agriculture and non-agriculture occupations and that the transitions are not unidirectional. Further, we find that the proportion of women who have dropped out of the workforce between 2004-05 and 2011-12 is higher among the households that have de-Agrarianised compared to households that have stayed in agriculture. The paper also finds that de-Agrarianisation negatively affects the likelihood of a woman staying in the workforce and household and individual-level characteristics such as caste, religion, age and education are significant determinants of the likelihood of a woman staying in the workforce.

## **TECHNICAL SESSION 1.14**

### **Effects of Economic Reforms and Aspiration of High Economic Growth with Trade Liberaliation on High Level of Unemployment and Lack of Effective Demand in Indian Economy**

**Dhiraj Kumar Bandyopadhyay**, Formerly, Department of Economics, University of Calcutta, Kolkata, West Bengal.

The main objectives of our study are to examine that how far economic reforms with aspiration of high level of gross domestic product (GDP) and trade liberalization have been able to generated higher level of output and employment in India. In fact, high or slow growth of GDP should not be the end goal of an economy, and if at all it is an end goal, then could we mean may not ensures economic well-being of all individuals in an economy unless distribution of income shared by all, particularly, in an economy where organised sectors employing only 10 per cent of total workers and rest of the workers are being employed in the unorganised sectors. Then this slowdown might be either due to structural problem or cyclical one, and structural problem is associated with the macroeconomic adjustment programme when an economy is used to face with both the problem of internal and external front, on the other hand, cyclical problem is fully associated with the short term macroeconomic problem and could be solved by adjusting macroeconomic policy variables. We have the experiences from last two decades of the world economy and without prejudice to argue that despite the best efforts of generations of economists, the deep mechanisms of persistence economic growth remain elusive. No one knows when growth will pick up again in developed economies, in developing economies or the so called emerging economies, or what to do to make it more likely. We have examined that so far “Growth - Employment - Inflation Balance” is not that straightforward what government policy makers claimed since 1990-91 in the context of fiscal and monetary policies in general and controlling fiscal deficit in particular after carefully evaluating the empirical validity of economic growth models for the world economy as a whole. We have observed that the Indian growth story has so far been one of jobless growth is now widely known. In spite of a marked acceleration in growth of the GDP in the post-liberalization period, employment growth has been falling in the last three decades.

Having said these, we revisit theories of economic Growth in order to Search of end of high economic or slow economic growth. Then we have tried to examine financing current account by capital account of India's balance of payments and implication of the strategy of the capital inflow and fiscal consolidation and its implication on level of output and employment. This has necessitated examining the effects of fiscal deficit and investment-savings gap (public sector) on inflation and GDP growth in India during economic reform period in a standard macroeconomics framework. After that we wanted to examine the effects of Policy rate as a monetary policy instrument on GDP growth and a comparison between growth of gross value added and or GDP and growth of employment. This discussion leads to explain structural shift of employment in India and problem of effective demand

– an examination of macroeconomic implication in light of reduction of fiscal deficit and policy rate of central bank. The methodologies and techniques have been used here by using regression analysis and standard macroeconomics models. We found a significant spill over effect of foreign multinational presence in the Indian economy in terms of sales efficiency. The Indian firms are equivalent to or even better than foreign firms in terms of sales efficiency. This indicates that Indian firms could appropriate the indirect technology spill over from foreign companies and could offer products similar to foreign firms that prevented them from charging a price premium. However, in terms of operational efficiency, the domestic firms lag behind foreign firms till 2009 and perform at par with foreign firms in the post-2010 period. What is more, for India, the servicing burden of FDI in terms of repatriations, dividend payments and payments for use of intellectual property is now showing up prominently. The RBI has reported that between 2009-10 and 2014-15, outflows due to repatriation, dividends and payments for technology have together constituted a major foreign exchange drain – nearly one-half of the equity inflows during this period. What is more, the RBI also has informed us that during the same period, subsidiaries of foreign companies operating in India ran negative trade balances in almost all manufacturing sub-sectors regularly drew out surpluses which look quite large when compared with the capital that the foreign companies were bringing in. Indian subsidiaries of foreign companies in the manufacturing sector run a huge deficit on trade deficit on trade account. The RBI shows by releasing data that there is a large dependence on imported inputs. Together with other payments and expenditure on other heads, the overall effect on the country's balance of payments could be substantial.

Policy makers have now realised and argued in the said Economic Survey (2020-21) that it was desirable to break the intellectual anchoring that had created an asymmetric bias against fiscal policy. Its goodbye to fiscal orthodoxy and wanted to spend like there is no tomorrow. That is what the government's 2021-22 Budget seems to signal with its fiscal deficit at 9.3 per cent of GDP for financial year 2021 and 6.8 per cent in financial year 2022.

We think that the change in fiscal stance is part of a selective departure from market orthodoxy that has marked government's economic policy in the last many years. What is more, the government has increased duties on some imports in order to protect and foster domestic industry. It has linked performance-linked incentives for designated sectors, something that goes counter to market economies. The government is, however, happy to adhere to other elements of market orthodoxy, such as privatisation and greater role of foreign direct investment. The Budget for 2020-21 thus marks an important departure from one of the key tenets of the Washington Consensus, the framework for market-oriented economics which has dominated policy making in most parts of the World. 'Macroeconomic Stability' is central to the Consensus and it means that government budgets need to be broadly in balance so that borrowings to finance the deficit are kept to the minimum. 'Austerity' became something of a mantra. It has been bitterly contested in recent years, especially in Europe, but austerity won the day until, the COVID-19 crisis struck. International Monetary Fund (IMF) and World Bank, both flag-bearers of the Washington Consensus, have been urging a departure from fiscal orthodoxy in the wake of the pandemic. Both these institutions used to be wary of any increase in the

public debt to GDP ratio beyond 100 per cent. Today, they are urging to the advanced economies to spend more by running up deficit even when the debt to GDP ratio is poised to rise to 125 per cent. In same way, said Survey says that, in the current situation, expansionary fiscal policy will boost economic growth and cause debt to GDP ratios to be lower, not higher. Given the India's growth potential, we do not have to worry about debt sustainability until 2030.

But our concern is that as proposed in the Budget 2022-23, government would increase government spending in order to increase output and employment by borrowing more (i.e. by increasing public debt), RBI will purchase public debt at a lower level of interest so that government's cost of borrowing would be lower (as assumed by the government that until cost of borrowing is lower than GDP growth rate it can borrow more). But we think this way of RBI's decision on intervention in public debt market (by purchasing public debt) interest rate would be lower in the money market and it would hurt the normal functioning of the money market (although it will serve the twin objective of government by lowering cost of public debt and other implied objective of the government to promote private investment as it pleads by saying 'crowding-in' effect by the said move in the current year's budget). The continued emphasis since Budget 2021-22 to Budget 2022-23 on capital expenditure (capex), which decisively alters outcomes of public outlays, as government claims, is a long awaited expenditure reform. Policy makers have claimed that capex has gone up by 26 per cent, from Rs 4.39 trillion in FY21 to Rs 5.54 trillion in FY22. They have also argued that Job creation will be the direct outcome of enhanced capex and altering of employment patters in seeking more gainful employment and asset creation, such as through the National Highways Development programme and national infrastructure, giving an impetus to 'Gati Shakti' , a new term coined by this current year Budget. Then we will have wait for some more years to evaluate how (at least in the medium-run) far government would succeed to generate more output, utilisation of capacity and level of employment. But we argue that, large scale privatization almost always involves substantial FDI. In South East Asia and Eastern Europe, privatization of banks meant a large rise in foreign presence in the domestic economies. 'Atmanirbhar Bharat' connotes greater self-reliance and stronger Indian companies. How does the government reconcile a rise in FDI with 'Atmanirbhar Bharat'?

We argue that government's deliberate attempt to make a nexus between reduction of fiscal deficit and promotion of inflow of capital may jeopardise external and internal balance of the economy as well as growth of employment in particular, in an economy where 1.2 core of new labour force will enter the labour market. So government's ambition for higher economic growth would lead to serious macroeconomic imbalances - leading to high level of involuntary and underemployment where economy has already suffering from inequality in all sphere of socio-economic life.

So, for the sake of argument, we could have an economy that has rising level of inequality (according to the International Monetary Fund, 2014 and 2016, India's Gini coefficient rose to 0.51 by 2013 from 0.45 in 1990, then as of November 2016, and as of now India is the second most unequal economy in the world), high level of corruption as cited above, increasing alarming level of unemployment and worsening public health facilities as well as air and water pollution, and still have rising levels of GDP. The admirers of high GDP growth should realise, that the best bet, therefore, for a country like India

is to attempt to do things that can make the quality of life better for its citizens with the resources it already has: improving education, health, level of permanent employment and the functioning of the courts and the banks, and building better infrastructure. To overcome acute unemployment problem, in a short term as well as on long term basis, the government can increase public expenditure by incurring capital and revenue expenditure through large scale enhancement of infrastructure sectors and its related public sector industrial enterprises as well as social infrastructure.

### **Informal Economy and Gender Gap in Earning in India: A Decomposition Analysis**

**Anupam Hazra**, Assistant Professor, University of Kalyani, Economics Department, Kalyani, West Bengal

This paper examines the economic, social and cultural factors that influence informal female labour participation. These are considered to be the most important challenging situations for the policymakers in an age of globalisation. An outward de-casualisation and an extensive increase in self-employment has in the informal employment. Those dispositions are also accompanied by a decline in agricultural growth, a decline in agricultural investment, and a decline in agricultural and non-agricultural wage. This paper acknowledges the reducing women's participation at the aggregate and at different levels of disaggregation. The inclination is stronger for the much less educated, the married girls and in younger age organisations. The econometric estimates specify that religion and social perceptions of women, their level of training, family size and family assets (land) have an impact on the females' chances to participate in the labour market.

The paper explores that a multitude of factors has contributed to the recent sharp decline and long-time period stagnation in the labour force participation amongst the working-age women. Some of those factors, such as increased attendance in training and higher family profits, are a net tremendous for society and a reflection of India's speedy monetary development. Decomposition analysis explains a vast gender pay gap is recognised in the Indian informal labour market. The gap is widened all through the reform's duration. The results of social and cultural variables, inclusive of caste and religion, are important for determining choices regarding the informal labour participation among females. With an improvement in household assets, the household restrains its woman member to participate in economic activities. It was believed that economic reforms in India would raise investments and increase in salaried employment, but this did not happen: jobless rose, business stagnated, and so did the agrarian disaster.

## **Unlocking Employment Opportunities in India through E-Commerce**

**Nalin Bharti**, Professor of Economics, Department of Humanities and Social Sciences,  
Indian Institute of Technology Patna, Bihar

**Aditi**, Doctoral Candidate, Indian Institute of Technology, Patna, Bihar

This paper analyses employment opportunities in India's E-commerce, with an intention to understand how India's burgeoning population and the rising middle-class during COVID-19 has served as a huge market for getting goods online, which has offered employment opportunities for the workers involved in E-commerce enabled activities. Nass-com has reported a 22 percent year-on-year growth in the E-commerce workforce in 2020. The proliferation of E-Commerce services all over India provided the informal sector an opportunity to make use of digital technology to connect with customer base, have secure source of income, and get themselves employed. Amazon delivery boys, Ola drivers, Tutors on Unacademy etc., expanded the spectrum of secured job opportunities in the unorganised sectors. It has created a new version of "informalisation of the formal sector", underlined by the accelerated growth of the Gig economy. E-commerce companies in India have actively hired workers during the pandemic in order to cater to the demand as the COVID-19 accelerated online shopping. These new data on fresh employment provide many new directions in India's labour economics circle. Apart from a huge online goods market, new areas of online commerce and trade in services like education, health, hospitality and tourism have been added as the new E-basket of opportunities for subscribers and workforce. This paper unlocks new opportunities of employment in Gig economy through online + offline collaborations in Indian economy.

The study's findings point out the crucial need to have a national level policy for informal workers and E-commerce expansion to rectify possible challenges such as digital Infrastructure development for extending social security to informal workforce in India.

## **Workforce Participation in Tribal Districts of Jharkhand: A Comparative Study of STs and SCs**

**Jyoti Prakash**, Asst. Professor, University Deptt. of Economics, Ranchi University, Ranchi, Jharkhand

The tribals of Jharkhand are dependent mainly on three sources of their livelihood and they are agriculture, forestry and migration. The work force participation rate of SCs for male in 2001 is greater in every district of Jharkhand as compared to female work force participation rate. There is a huge gender-gap in WFPR in Dhanbad and Bokaro district with -35.36 and -34.83 which is highest among all the districts, the reason behind this fact is that both of the districts has been dominated by industrial areas. The gender-gap in WFPR for STs in 2001 is maximum in the district of Dhanbad and at the same time the gender-gap in WFPR for SCs in 2001 is highest in Dhanbad district too.

## **Women, Work, Working Condition on the Construction Sites: A Case of Study of Gandhinagar District**

**Priyanka Rajput**, Ph.D. Research Scholar, Central University of Gujarat, Gandhinagar, Gujarat

**Tulika Tripathi**, Assistant Professor, Central University of Gujarat, Gujarat

Despite the fact that women constitute 48 percent of the population, their labour market participation remains historically low and has gone down further in recent times. Those entering the labour market with difficulties have to also suffer from wages discrimination, unequal job opportunities and poor working conditions. The gendered discrimination leads to low human capital, combined with unequal job opportunities pushing them to poor quality jobs. All this culminates into low wages, poor working conditions and health hazards. Furthermore, they had to face the dual burden of work (household work and their job). The present case study explores the work and working conditions of female labour in the construction sector. The study suggests that, often the female construction workers are migrants moving with the family. So, employment in the construction sector continues with the patriarchal setup.

This study was carried out in Gandhinagar, Gujarat. Around 100 construction women workers were interviewed through a semi-structured questionnaire. All most all the women workers are migrants. They migrated with their family members, which has specific implications for life and livelihood opportunities. There is no apparent discrimination in wage payment; however, it happens very systematically by hiring women workers for the low paid unskilled task. Our analysis showed that most of the women are doing unskilled manual work. Their working conditions is very poor, combined with the occupational health hazards. They reported several health problems and accidents at the construction sites, and particularly severe health issues during pregnancy. The access to health services remains very low as they don't get sick leave and therefore doesn't seek treatment, also the cost of treatment remains a further concern.

## **Agrarian Change in India in the 2000s: A Study in Continuing Distress**

**Saurabh Rastogi**, Doctoral Student, South Asian University, New Delhi

The period of 1990s witnessed very high distress in Indian agriculture, particularly the period from 1995 to 2003, which accounted for high indebtedness and over one lakh farmers' suicides [reported by National Crime Records Bureau (NCRB), unreported numbers can be even higher]. This led to some important policy interventions in the 2000s; public expenditure on agriculture grew, resulting in higher investment on infrastructure, irrigation facilities and credit supply. Interestingly, there is some literature which states that income of agricultural households grew significantly and there were higher growth rates in agriculture during the 2000s. However, this is not the entire story: There are several case studies which state low or even negative returns from cultivation. So, the question arises, are those instances of distress sporadic, or is there something systematically wrong about the growth process of the 2000s, where some sections of farmers are doing well vis-à-vis others.

There has not been a proper analysis to understand the growth process of the 2000s and the dynamics of its agricultural households. The negative income households are the ones who are not even able to cover their costs, let alone earning a decent livelihood. For this, we have taken the total value of output, means if something is used for self-consumption, that is also taken, and on the expenses side we are just taking the paid-out expenses and not the imputed value of expenses. We found that most of these households are situated in the states like Andhra Pradesh, Telangana, Maharashtra, Karnataka, Tamil Nadu and Rajasthan, both in absolute and relative terms. And, they are mostly engaged in crops like paddy, cotton and wheat. Besides, in terms of expenditure incurred on cultivation, they are spending more than non-negative income households on inputs per hectare like seeds, chemical fertilisers, leased land, human labour, machines, interest on loans. In fact, their average leased land and average possessed land are both higher than the non-negative income households, so they are not some peripheral households who are using agriculture as a secondary occupation; instead, they are ambitious households who are spending more on land, labour, machines, and other inputs, though still incurring losses. So, this dependence on markets is going against the interest of these classes of farmers. And, we will also see episodes of better prospects for households, where the government machinery is more effective. So, government intervention is definitely instrumental in deciding the income dynamics of these households. Besides, we will also see that they are spending less on inputs like diesel and electricity, but more on human labour, so, this also hints towards the likelihood of capital-intensive farms doing better than the labour-intensive farms with higher market dependence.

### **Implications of Rural Employment Diversification on Farm Household's Consumption Expenditure in India**

**Kashmiri Das**, Research Scholar, IIT Guwahati, Guwahati, Assam

**Amarjyoti Mahanta**, Assistant Professor, IIT Guwahati, Guwahati, Assam

Rural employment diversification from farm to non-farm sectors has become an important livelihood strategy of rural households in many developing and transition nations including India. Although, initially regarded a residual sector, the rural non-farm sector has gained prominence as a potential source of income and employment generating sector. There has been a gradual rise in the share of rural non-farm employment from 35 percent during 1980–81 to 62 percent in 2004–05 in India. As such, diversification has been the norm rather than specialisation (Lanjouw, 2001).

Our study focuses on rural India. The poorer sections are not only deprived of food but they also do not have access to education, health and other requirements, which contribute to human development. Despite economic growth, the pace of poverty reduction and improvement in nutritional aspect is slow compared to that in some other Asian countries. Given the small holdings nature of agriculture and increased marginalisation of land holdings, this sector cannot be expected to augment household welfare in the long run. Although India is self-sufficient in food production, yet a gradual fall in cultivators and a rise in agricultural labourers has made this section more food insecure.

Our study focuses on the welfare implications of rural employment diversification of farm

households on household welfare. Welfare is represented in terms of expenditure incurred by the farm households on their food and non-food components. The distinction between food and non-food components is crucial since the overall welfare is not only limited to a household's ability to incur expenses on food requirements but also in its capacity to spend on education, health and other services, which comprise the non-food component. Expenditure on non-food items contributes not only to labour productivity but also in breaking the vicious circle of poverty, thereby enhancing economic growth. Moreover, with a change in household income due to diversification, the preferences of these households towards food and non-food items would vary, which would be reflected in their relative share of food and non-food expenditure. Therefore, our other outcome variable of interest apart from food and non-food expenditure includes their relative share to total household expenditure. Our study distinguishes between self-employed farm- and casual farm households, as the former types of households being the producer of food are considered to be more food secure compared to the casual farm households. Poverty is also prevalent among agricultural labour households, as they represent 41% of the rural poor while among the self-employed farm households, the incidence of poverty has reduced from 32% to 21.6%. Therefore, their differing economic status is expected to not only have a different impact on their likelihood to diversification but also on their consumption expenditure.

To estimate the causal effect of rural non-farm employment diversification on farm households' consumption expenditure, a propensity score matching (PSM) method is applied using data from NSSO employment-unemployment survey, 68<sup>th</sup> Round. The findings from PSM method demonstrate that diversification strategy is not always welfare-enhancing and varies across household types. While cultivator households are better-off specialising in agriculture rather than shifting to non-farm activities, casual farm households could enhance welfare through increasing both their food and non-food consumption expenditure as well as a rise in non-food expenditure share compared to food expenditure share. Also, the benefits accruing to casual farm households is greater than those to self-employed farm households, which indicates that the non-farm sector can be a boon for the rural poor.

From a policy perspective, focus should be placed on establishing small- and medium scale industries, specifically developing the agro-processing industries. This would not only absorb labour force in non-farm sector but would even boost growth linkages with the farm sector. Rural infrastructural development like construction of roads, electrification and better transport facilities together with provision for formal and vocational training would enhance the scope of rural households to diversify towards non-agricultural activities.

## **Employment of Persons with Disabilities Post RPWD Act, 2016: A Check**

**Shalini Garg**, Professor, Guru Gobind Singh Indraprastha University, New Delhi

**Aarti Sehgal**, Research Scholar, Guru Gobind Singh Indraprastha University, New Delhi

*Purpose:* People with disabilities are increasingly commonly acknowledged as a significant resource in the workforce. Despite the RPWD Act, 2016 the unemployment rate for people with disabilities has remained stable for decades, hovering between 60% and 70%. Employers' unfavourable attitudes are one of the most significant hurdles to job prospects for individuals with disabilities, according to extensive research evaluations. The purpose is to analyse companies' views on hiring people with disabilities in various sector companies. The study summarises the current status of disability and employment studies.

The study is qualitative, exploring company efforts towards hiring and integrating PwDs. Despite a lot of determined initiatives and rules, Indian businesses have a long way to go when it comes to employing persons with disabilities. Future research should look into the viewpoints of other factors responsible for acting as a barrier for the employment of PwDs.

This study holds originality and not being considered anywhere else. This study will help the practitioners, NGO's, researchers to gain more insights.

## **Agrarian Differentiation in Punjab: Investigating the Role of Tenancy**

**Harshita Bhasin**, Ph.D. Scholar, South Asian University, Delhi

Farmers of the Indian state of Punjab have been widely hailed for waging a remarkable struggle against the Indian State over the three contentious farm laws. While the popular discourse has largely viewed the farmers' protests as a spontaneous reaction to the farm laws, this paper traces their roots to a long-drawn process of escalating vulnerability of agrarian livelihoods in Punjab on account of the neoliberal turn of the Indian State in recent years. In particular, the paper aims to draw attention to a puzzling feature of agrarian unrest emerging from Punjab: the united front presented by Punjab farmers hides significant socio-economic differentiation amongst the farming community of the province. The paper uses empirical evidence from NSS's Situation Assessment Surveys of Agricultural Households to establish considerable differentiation amongst Punjab farmers, based on their potential to generate surpluses which is closely linked to their ability to scale up production via leasing in land.

Recent literature on Punjab presents a highly uneven situation of agrarian livelihoods in the province. Evidence from various national databases establishes that Punjab continues to be the most agriculturally prosperous and technologically advanced province in the country. However, a large number of scholarly articles (Bharti, 2011; Gill and Singh, 2006; Sidhu, 2002; Singh 2017) draw attention towards widespread farmer distress in Punjab, since the early 2000s. While scholarly evidence on Punjab

agriculture outlines widespread heterogeneity across landholding groups, preliminary accounts of the farmers' movement have hailed solidarity across different categories of farmers and farm labourers. This makes a case for an investigation into agrarian changes in Punjab in the recent decades.

A key finding of the paper is that agricultural households in Punjab are highly differentiated in terms of their livelihood outcomes. In fact, access to income from cultivation seems to be a key differentiator across various size-classes of land. Also, there seems to be evidence of intense competition for leasing-in land, which has long-run implications for agrarian differentiation in the state. However, the accumulation potential of all agrarian classes in Punjab seems to be threatened by an economic crisis, which has been underway in the province on account of dwindling state support to agriculture.

The paper concludes that simmering discontent from neoliberal policies of the state has trumped significant local political economy factors to create a powerful farmers' movement in the Indian Punjab.

## TECHNICAL SESSION 1.15

### **Employment Trends and Pattern of Growth: West Bengal in the Left Period**

**Debolina Biswas**, Assistant Professor, Gurudas College, Kolkata, West Bengal

This article discusses the employment trend and changes in the composition of employment in West Bengal during the “Left” period. It further argues that the observed pattern of employment is associated with the nature of growth the state economy had followed over the period. The entire discussion is divided into two phases of the left rule, as the continuous 34 years was not homogenous. The first period of the left rule is the pre-reform period when Left actually focused on land reform and agricultural growth. The article shows that during this period, when agricultural growth was high, the state economy actually witnessed job creation in rural manufacturing and the rural service sector.

The second period of the left rule coincides with the post-reform period. During this period, the state economy witnessed high growth; however, the employment generation did not happen much in the manufacturing sectors. It was mainly the service sectors which created employment. This high growth phase is also associated with declining agricultural growth. It is in this period that women actually withdrew from agriculture. Finally, the paper argues that towards the end of the Left rule, the creation of employment was a challenge of the state. It is during this time, the massive informalisation had also taken place in the state.

### **Economy and Employment during Outbreak of the Covid-19 Pandemic and Lockdown in India**

**Ramesh Ram**, Research Scholar, Babasaheb Bhimrao Ambedkar University Lucknow, Uttar Pradesh

**Surendra Meher**, Assistant Professor, Babasaheb Bhimrao Ambedkar University, Lucknow,  
Uttar Pradesh

The outbreak of Covid-19 is a big and unexpected shock to the Indian Economy that was already in slowdown. The most significant impact on the economy due to this pandemic was on its GDP and employment. The GDP registered a negative growth during first and second quarters of 2020-21. In the Indian economy, a large majority of workers are employed in the informal segments, both in the organised and unorganised sectors. For workers who cannot avail employment, circular migration happens to be a common feature for them. However, due to the ongoing pandemic, the unfortunate issue of reverse migration took place. The Covid-19 and lockdown forced migrant workers to migrate from urban areas to their native places. The declaration of the lockdown resulted in millions of these migrant workers having lost their jobs and left them unemployed, with no social security. The outbreak of pandemic and lockdown had triggered the unemployment rate which was already at its peak.

This paper explores the state of the Indian economy during the pre- and post Covid-19 era and assesses the potential impact of the shock on various sectors of the economy. It also explores the scenario of employment and unemployment during the pre and post Covid-19. It also examines policies that have been announced so far by the Government of India, by State/UT and the order, instructions and guidelines issued by the Supreme Court of India and policy and initiatives taken by the Reserve Bank of India to tackle the economic shock, employment opportunities and put forward a set of recommendations for specific sectors. The study uses national-level data from the Centre for Monitoring Indian Economy (CMIEs), various issues of Economic Survey, National Account Statistics (NAS) reports, NSSO Quinquennial Report, Periodic Labour Force Survey, Press Note on Indian Economy, Press Release Report (PRS) during Covid-19 Pandemic.

The nature and conditions of employment in the Indian labour market has worsened in the recent years. The NSS and PLFS reports reveal that the informalisation of work was about 92 percent during the pre-Covid-19 pandemic and lockdown. In 2004-05, about 59.1 percent people were without job-contract, which has increased to 67.3 percent as per PLFS of 2019-20. These reveal that the economy and labour market was already in worst condition and the Covid-19 pandemic and lockdown have multiplied this worsening condition.

According to the World Economic Situation and Prospects as of mid-2021, this global crisis has “clearly worsened poverty and within-country inequality”, and it is expected that “will leave long-lasting scars in labour markets, while reversing progress on poverty and income inequality in many economies.” The context in India in this sense is very complex. Maharashtra, Delhi, Kerala, Tamil Nadu are some of states that have been affected to a large extent. The involuntary and forced nature of reverse migration due to the sudden lockdown, with lack of preparedness and planning by the Central Government, irresponsible behaviour of the employers and social hostility have worsened the conditions of migrant workers. The lack of migrant data and registration in welfare schemes have excluded most of them from the relief package benefits announced by the Central and State/UT Government. Covid-19 crisis has magnified several pre-existing problems faced by the migrants, which led them to suffer at different stages of their reverse migration. The Central Government with the coordination of state government has taken many steps to improve the conditions of informal workers and reverse migrants, which include arranging transport facilities for migrant workers, cash transfers, provision of food grains, providing employment under MGNREGA, and so on.

Keeping in view these findings, the paper suggests that there must be sufficient employment opportunities needed to be provided, especially in rural areas to push up aggregate demand. MGNREGA still plays a significant role to this extent. MSMEs need a special focus by providing adequate credit and infrastructural support. Further, it is high time that the government spends heavily to improve the health infrastructure in the country particularly in rural areas.

## **Mobility Constraints and Labour Market Outcomes in Urban India: New Evidence from Delhi's Free Bus Rides for Women**

**Vastav Ratra**, Student, Birla Institute of Technology and Science Pilani, Rajasthan

**Rishi Kumar**, Assistant Professor, Birla Institute of Technology and Science Pilani, Rajasthan

Women face severe constraints to their mobility and social participation in the urban areas of the developing countries. These constraints include poor public transport, un-inclusive public spaces, low perception of safety, lack of consent from the household, among others. In this paper, we study the effects of a policy that tried to address some of these barriers to the social participation of women in Delhi. Starting late October 2019, the Delhi Government made all public transport free for women, hoping to make it more accessible and affordable for all. In practice, paying for public transport was made optional for all women.

In order to understand the effect of this reform on women's mobility, we create a matched sample of women from the Time use in India Survey conducted in 2019. We use propensity score matching to construct a 'pseudo-panel', matching women in pre- and post-treatment periods, to counterfactuals across 25 major Tier-II cities in North India. Our results show that the policy did not significantly alter the proportion of women who reported travelling in the previous day or the total time spent on travelling. However, there is a modest increase in the time spent on travelling for employment, suggesting that the scheme might have encouraged women to take up jobs that are farther away from their homes, increasing their choice set. This result is in line with previous literature that suggests that women take jobs closer to their homes, and suffer significantly larger distance penalties than men.

In order to confirm that our results are not driven by seasonal trends, we carry out a year-on-year comparison by using a matched sample from the three waves of the Periodic Labour Force Survey. Our results suggest that the policy encouraged previously socially active women to take up employment at farther-away places, but could not increase social participation along the extensive margin.

## **Estimates of Households Characterised by Low Earnings in Rural and Urban India**

**Vasavi Bhatt**, Assistant Professor, Doon University, Dehradun, Uttarakhand

This paper highlights the issue of inadequate household earnings. To this end, it complements the extant literature on household poverty in India, which is based on inadequate consumption. Within adequacy of earnings falls the concept of low paid workers and low earnings households. When the income of an individual or a household is below a threshold, the individual is considered to be low paid or the household is characterised as one with low earnings. The literature on adequacy of earnings has mostly concentrated on low paid workers, especially regular wage/ salaried, or workers living in poor households. In this paper using the three rounds of the Periodic Labour Force Survey (PLFS) dataset we investigate the incidence and characteristics of the low earnings household in rural and urban India. The information on earnings of the self-employed in the PLFS enables us to provide estimates

of households whose monthly per capita household earnings is below a threshold. Undertaking a household level analysis also allows us to sidestep the issue of number of hours worked, earnings of unpaid workers and absence of social security to a large share of the workforce in developing countries.

By focusing on household earnings this paper opens another flank in the literature on household well-being which has primarily focussed on consumption poverty. We update the Rangarajan committee poverty line by the Consumer Price Index and further scale it up by 12 percent to construct the low earnings threshold. We also provide alternate estimates based on the Tendulkar committee poverty line and the World Bank's \$3.20 per person per day poverty line for lower middle-income countries. Based on the all-India low earnings threshold derived from the Rangarajan committee poverty line, the proportion of low earnings households is found to be 30, 26 and 28 percent in rural India and 20, 18 and 20 percent in urban India for the years 2017-18, 2018-19 and 2019-20 respectively.

We also find that the incidence of low earnings households varies across states. Some states have higher than average share of such households in rural and urban areas. The analysis reveals these states to be Bihar, Maharashtra, Madhya Pradesh, Odisha, Rajasthan, Uttar Pradesh and West Bengal that account for around 70 percent of rural low earnings households in all years. In urban areas, 60 percent of low earnings households belong to the states of Maharashtra, Madhya Pradesh, Rajasthan, Tamil Nadu, Uttar Pradesh and West Bengal in all the three years.

Households whose major source of income, as identified by household type, is regular wage/salaried, are least likely to have inadequate earnings. Workers in low earnings households also have jobs different from relatively high earnings households which is illustrated with the distribution of workers by their economic activity in one worker and two worker households. The large share of workforce in self-employment comes across as a major factor behind the inadequacy of earnings since self-employment in developing countries is less productive and mostly subsistence in nature. The coexistence of unpaid workers with self-employed workers in a household is also indicative of resource constraints within a household.

### **Transformation in Labour forms—Attached Labour to Wage Labour and the Persistence of Saori—A Form of Compulsory Labour Exchange in a Bodo Village of Assam**

**Mizinksa Daimari**, Consultant, International Maize and Wheat Improvement Centre (CIMMYT), Pusa, Bihar

**Rajshree Bedamatta**, Professor of Economics, IIT Guwahati, Assam

In the social sciences, the phenomenon of attached labour in the post-green-revolution period has been looked into through various perspectives. The questions that were asked in this literature has focussed on whether modernisation and development of capitalism in agriculture with the push of green revolution by the state would herald a death knell to traditional agrarian relationships like attached labour. Another phenomenon that was being looked into was the casualisation of labour. Authors like Breman (1974), argued that in the post green revolution phase the traditional ties and structures

in the agrarian setup would disintegrate, terming it as the de-patronisation of agrarian structures. De-patronisation would not only free labourers from traditional ties but also lose their security of patronage earlier enjoyed by them.

Labour relationships in a post green revolution India has seen tremendous changes. However, in tribe dominated region of Assam's Bodoland Territorial Area Districts (now Bodoland Territorial Region) the change can be traced back to the tenancy reforms in Assam. We find that although pre-capitalist labour relations in the form of payment in kind and prevalence of compulsory exchange labour or saori is still to be seen, there is increasing casualization of labour. As a result of being in the stage of petty commodity production, reproduction of the tribe households has become impossible without market interactions in production, in fact, sustenance of the household is not through subsistence but by earning incomes elsewhere. After 1991, the state of employment has been decreasing and the region has been seeing increased migration to metropolitan cities for better jobs. Reports also suggest a rise in domestic work among the Scheduled Tribe in the region. All these point to changing labour situation in northeast of India. Here too feudal relations have been broken although ties of labour to land especially in the hills is intact.

We see that with the Bodo tribe transition from a pre-capitalist economic order into a petty commodity production economy. Our study in Majrabari finds that there is an increasing casualization of labour with old forms of labour relations being freed over the years. The use of wage labour for all the processes of agricultural production is a testimony to this.

Commodification of the means of production land has brought about the commodification of their subsistence, so much so that the Bodo way of life cannot be reproduced without market interactions. This market interaction can be seen in Majrabari where during an agricultural season the various aspects of production especially capital and labour is sourced through interactions in the market.

Farming is considered subsistence by the households in Majrabari. It is because there is not much income to be earned by means of cultivation alone. The sale of crop is insubstantial which means the reproduction of this subsistence is undertaken through pooling of resources from income earned elsewhere—mainly from non-farm income or labour wages. There is indeed a growing need for cash at the time of production in agriculture seen in the high costs of production especially in labour and the increasing use of machines in farming (via rent). Such an operation is sustained only if a household is able to earn incomes elsewhere.

### **From Thekedaar to Staffing Solution Providers – The Evolution of the Indian Labour Contractors**

**Lakshmi Parvathy**, Doctoral Student, Indian Institute of Management, Bangalore, Karnataka

**Rajalaxmi Kamath**, Associate Professor, Indian Institute of Management, Bangalore, Karnataka

Known as Thekedaar, Sardar, Maistry, or Jobber, the labour contractor has been a crucial intermediary in the triadic relation between labour, state, and capital in India. To further understand this entity of labour contractor, the paper traces the evolutionary trajectory the labour contractor from its earliest

forms of an individual in the 19<sup>th</sup> Century to its most recent forms in human resource companies. In tracing this genealogy, our task is to understand how the labour contractor has morphed and its historical role in determining the current issues of labour mobilisation and organization. In order to situate the evolution of labour contractor, the paper then looks at the legal standpoints of the State and follows the shifts it has made overtime. The paper finds that legal system has followed labour contractor in its evolution and growth, and have manifested shifting attitudes from being abolitionist, to being regulatory and accommodative. The labour contractor today has created their niche and the shifting politico-legal attitudes guarantees a strong foothold and opens up newer avenues to evolve further. This has great many implications in the rise of flexible and fungible labour and their wages, working conditions, mobilization, and bargaining power and in altering the fundamental nature of the employer-employee relation. We, thus find the role of the Indian labour contractor is crucial to understanding the evolution of the Indian labour force as a social class. Finally, the paper finds that in its most recent forms, labour contractor offers many lessons for traditional mechanisms of labour mobilization. namely, labour co-operatives.

One of the main contributions of the paper is to look closely at the labour contractor which spans both formal and informal relations in India labour market today. This calls to shift our emphasis on this historical and political construction rather than attributing contrasting social and cultural characteristics of labour in the two sectors.

### **Women's Labour force Participation during the COVID Pandemic- Intersectional Perspective**

**Monisha Israni**, Senior Policy Analyst, Research and Policy House, Leaders Institute- Australia

**Vikash Kumar**, Assistant Professor, North Michigan University, USA

Gender-specific roles and beliefs are promoted through the laws and social norms and reproduced through state, schools, media and families. In the Indian context, gender norms beliefs system is deeply conditioned with morals and ethics in the division of labour. The notion of morality at an individual level holds different meanings for men and women as a result of this conditioning right from their childhood years. For men, it relates to the prioritisation of work over families, whereas for women, it implies family over career. Women are expected to identify with family and are required to invest their time and energy to maximise their performance to the gender-specific roles such as cooking, cleaning, raising children, providing care to the elderly in the family.

As a result, they alone fight for a work-family balance compared to the menfolk. Significant socio-legal changes concerning flexible working hours, childcare facilities, day boarding and residential government schools and emergency support care for children and elders (Buddhapriya, 2009). Although the pandemic has further exposed this need, policies and provisions remain a back burner agenda as stereotyped gender roles interwoven in cultural psychology do not visualise this as a grave issue. As a result, women's lives are unjustly work-life imbalanced. The cultural acceptance of such invisible sacrifices and a more significant burden of shouldering traditional gender roles are often overlooked as

it is common in the Indian psyche. It is important to note that deep-rooted socio-cultural norms and techniques continue to intensify this gender divide during the economic aftermath of this pandemic.

The current scenario has created a felt need for employers to direct resources from their shrinking revenue towards their human capital. They are now being compelled to conduct online workshops, webinars and training modules to keep their employees at par with the rest of the world. There is an urgent need to recognise the challenge and work-life conflicts and imbalance experienced by women in their everyday life during this pandemic and invest in supportive measures to ensure that all women have equal access to resources and support (Addati et al., 2018). For this to occur, structural changes are needed at a societal-cultural level in terms of how women and men are socialised into gendered roles and expectations; at the government and institutional level to amend and change laws, policies and programmes; and at employer organisations level to implement gender equality policies and programmes.

### **Challenges of Ever Greening Unemployment in India: A Critical Appraisal**

**Subhash Chandra Roy**, Professor of Law, Dean Research and Development, Chanakya National Law University Patna, Patna, Bihar

Life under Article 21 is 'not a decent life' until one has livelihood under Article 39(1) (a), as is evident in the Indian Constitution. The source of livelihood is of course 'employment'. The employment opportunity is a fundamental right under Article 16 of the Constitution. Life becomes "decent" only when there is livelihood guaranteed in the form of entrepreneurial engagement or employment. Employment is a source of perennial earning. It determines the standards of living, health education and further development. This problem is always discussed in daily discourse, especially in elections. All the political parties accuse the other in power for ever-greening the problem of unemployment. Unemployment is directly proportional to poverty, health and illiteracy. Hence, the chain of poverty and illiteracy can be broken by creating jobs and providing employment to the masses. But no government has been successful in its endeavour.

In this context this paper seeks to study the meaning, reasons and way out of the unemployment challenges. The demand for jobs from the government is made by the educated, uneducated, skilled and unskilled. When the educated are unable to get government employment, they call themselves unemployed even they are engaged in own-business or the private sector. Thus, the issue of unemployment is principally concerned with government employment. This remains a challenge every year with the pass-out students from various disciplines in universities. The retirement rate is less in comparison of the demand for employment; hence the vacancies and the recruitment ratios are uneven. More so, the concept of contractual appointment of retired persons in the name of experience diminishes the opportunity for young aspirants. It results in a few vacancies and more applications, and along with the reservation policy, many talented aspirants feel dejected. Hence, unemployment is cropping, piling, multiplying, renewing and ever greening every year.

The subject or discipline is unable to provide employment or job opportunity. Even the teaching and evaluation processes have become liberal and unaccountable. The reservation policy, though essential and beneficial, is yet unable to cope with the rising demands with increase in the population. The philosophy of distributive justice requires to apply in all the reserved categories so that the extremely needy in the reserved categories can avail of the opportunities. More so, once the person avails such benefits s/he requires to be excluded from the reserved categories. This will help achieve the goal of an egalitarian society. The government has followed an LPG policy; thus, privatisation and disinvestment are priorities on the government agenda. It is urgent to implement reservation policy in private sector companies as well, with a creamy layer principle.

The unorganised sector requires investment for its expansion and appropriate legislative protection. Almost all manpower engaged in this sector are bewildered and cry for employment security. Here, it is issue of periodical and seasonal employment too, which result in income insecurity. Such hidden unemployment is a great challenge. In order to resolve these issues, MGNREGA has been started. But the urban areas are also facing the same issues of seasonal unemployment. Here the MGNREGA programme requires to start. The private organised sector has no service code except minimum wages act.

In these scenarios, the finger is raised towards the employment policy of central as well as state governments. As the governments present fiscal budget in the assemblies and the parliament, in the same way 'employment budget' requires to be presented. The population of job seekers, their qualification, number of vacant positions in organised sector, both in government and non-government, unorganised sector jobs in agriculture, people engaged in self-employment, business sector; data on these require to be presented every year through gram panchayats, municipalities /corporations and employment exchanges.

Human rights activists demand right to work be declared as a fundamental right. But employment is already a human right. "Rights" does not mean that one shall remain seated and job will be handed over to him/her. Here, the concept of human rights with respect to employment requires to be reconceptualised. The ever-greening factors of unemployment are rooted in the 'Rights Jurisprudence'. The 'duty jurisprudence' is creative and constructive which believes in 'human development' through learning and doing.

A broader (five years) employment policy with separate 'employment budget' every year along with population control measures can minimise the challenges of ever greening of unemployment in India.

## **TECHNICAL SESSION 1.16**

### **A Study on Growth Performance of Employment Generation through Deen Dayal Upadhyay Grameen Kaushalya Yojana (DDU-GKY) in India**

**M Soundarapandian**, Professor, Gandhi Gram Rural Institute-Deemed to be University, Gandhi Gram, Dindigul, Dindigul, Tamil Nadu

**Sandra Surendran**, Research Assistant, Gandhi gram Rural Institute-Deemed to be University, Gandhi Gram, Dindigul, Tamil Nadu

DDU-GKY is a component of the National Rural Livelihood Mission (NRLM), which has been assigned two objectives: increasing income variety for disadvantaged rural households and meeting the career needs of rural youth. DDU-GKY focuses on rural youngsters aged 15 to 35 from impoverished backgrounds. As part of the Skill India campaign, it contributes significantly to the success of government social and economic initiatives such as Make In India, Digital India, Smart Cities, Start-up India, and Stand-Up India.

This paper examines the growth performance of employment generation in India as measured by the Deen Dayal Upadhyay Grameen Kaushalya Yojana (Deen Dayal Upadhyay Grameen Kaushalya Yojana) (DDU-GKY).

On the basis of total training commenced, the participants were trained, assessed, and certified at the national level from 2015 to 2021. This paper has examined the growth and performance of DDU-GKY from 2015 to 2021, and has relied on secondary data from Kaushal Pragati, the Ministry of Rural Development's official Website. We calculated the performance of each state in terms of percentage as well as a year-by-year growth rate. The overall variable growth rate was at its lowest point at the start of the next four years. While the growth rates have recently slowed, the changes are encouraging, especially given the scheme's rural emphasis. Unemployment and poverty are likely to be eliminated in the coming years. Long-term changes can occur as a result of slow and steady growth. Because the country's existing project implementing agencies (PIAs) do not produce the amount of output required, this study recommends that the existing PIAs be thoroughly investigated.

### **Multilateral Negotiations on MSMEs and the Challenges for the Survival of Labour-Intensive Firms: A Case of China, EU, India and the US**

**Murali Kallummal**, Professor, Centre for WTO Studies, IIFT, New Delhi

**Simran Khosla**, Research Associate, Centre for WTO Studies, IIFT, New Delhi

**Keerti Singh**, Research Fellow, Centre for WTO Studies, IIFT, New Delhi

Globally small businesses are increasingly becoming the drivers of the holistic growth, contributing to development across sectors and regions. Despite these considerations, MSME participation

in international trade has remained insignificant and sparse. One primary reason has been the heterogeneity of the group across different countries in terms of financial and real asset endowment. Additionally, they are also hindered by their relatively small size (at the domestic level) and also, they face various obstacles that hinders their growth and development at global scale. The analysis of largest four markets, divided into labour- and capital-intensive industries reveals some interesting patterns.

Developing countries like India and China suggested higher trade creation effect across both labour- and capital-intensive products compared to developed economies for MSMEs sector. An informal arrangement at the multilateral level can lead to furthering some of the domestic challenges to the global level. It does suggest that wide variations in definitions can pose serious challenges, irrespective of development status of a country three capital-intensive industries to few sectors belonging to chapters like 84, 85, and 87 which are primarily electrical and electronics sectors, drying machines, boilers and automobile parts.

### **Caste, Ethnicity and Employment Gap in Skilled Jobs in Indian Manufacturing Sector- Endowment Gap vis-a-vis Prejudices**

**Tanima Banerjee**, Assistant Professor, Adamas University, Barasat, West Bengal

Neo-classical economic theories postulate that employment and wages are determined through the interaction of demand and supply. However, in reality the role of social norms and culture in the process of determining labour market outcomes cannot be denied. In fact, a huge number of empirical studies have taken into account the idea of labour market segmentation based of social identities of individual and have shown how gender, race, caste and ethnicity play pivotal roles in determining employment and wages. This study has looked into caste and ethnicity based differential labour market outcomes with respect to entry to skilled jobs in Indian manufacturing sector. Instead of looking into the employment gap in general in terms of labour market entry, the present study focuses on employment gap with respect to entry to skilled jobs with special focus on participation in high skilled occupations. Here, only wage employment has been taken into consideration.

This paper has not only investigated employment gap in skilled occupations, but it has also looked into its various components. It has tried to figure out whether the employment gap can be entirely attributed to the endowment gap and demographic factors, or a part of it can be explained by prejudices or discriminatory behaviours that are deeply rooted in the socio-cultural system of India against backward castes or ethnic groups. To accomplish this objective, the study has used Periodic Labour Force Survey (PLFS) Data for the period 2018-19. To measure the employment gap and its components, this study has applied non-linear decomposition method.

The results of the study suggest that socially more forward castes or ethnic groups are more likely to participate in non-elementary skilled jobs in India than socially backward castes or ethnic groups. For example, Scheduled Tribes (STs) are 23 percent less likely to participate in skilled wage employment than General Castes people in manufacturing sector. It is also worth noting that in each case, the gap in the probability to participate in skilled wage employment is not entirely accounted for by gap in

productivity factors. However, this study has revealed that the magnitude of employment gap and the contribution of prejudices or discriminatory hiring practices are both less when only high skilled occupations were taken into account. Additionally, the study reveals that even if employment gaps in general are lower in manufacturing industries when compared with the Indian labour market as a whole, the discrimination components seem to be at the higher end in the manufacturing sector. Thus, even if skill development among backward class workers appears to be very crucial in enhancing their earning potentials by increasing their chance to get absorbed in high skilled jobs in manufacturing industry, it cannot alone eliminate the employment gap. Skill development programmes should be accompanied by social awareness programmes and some stringent government policies to reduce discriminatory hiring practices in manufacturing sector. But, here again, the main problem is the increasing informalisation of formal employment. So, policies should not be restricted to formal sector employment only and proper care should be taken in this regard.

### **Agglomeration Economies Spatial Dependence and Employment Growth: Analysis of Textiles and Leather Manufacturing Industries in India**

**Pritam Datta**, Fellow-II, National Institute of Public Finance and Policy, New Delhi

Textile and leather manufacturing industries have a historical importance in the Indian economy in terms of generating employment, and thereby spatial concentration of these industries carries an immense policy importance. Once an industry begins to develop in a certain region, further growth follows if locational advantages continue to increase. Literature suggests that there are several factors that may influence growth of industry employment at local level, viz. own industry concentration (MAR externalities), local competition (Porter's externalities), diversity of local industrial base (Jacob's externality), market potentiality, infrastructure that enhance market access (e.g., road density, highway density, railways density etc.), level of urbanisation etc. Similarly, local congestion as well as increase in wage may act as discouraging factors for employment growth in a particular region.

This study analyses the spatial concentration of registered and unregistered textile and leather manufacturing industries at sub-national levels, examines neighbourhood effect on local employment growth of these industries, and finally examines the effect of agglomeration forces on the employment growth at industry-region level using spatial econometric model, for the period 2000-01 to 2015-16. This study estimates Ellison Glaeser Index to infer about the level of spatial concentration of Indian textile and leather manufacturing industries in India at sub-national level. In cross-section analysis, observations are basically the data collected for different regions and it is assumed that these observations are independent of each other. But for majority of the socio-economic events, regions are interdependent on each other. This study uses Moran's I statistics to compute spatial dependence of industrial growth of these two manufacturing industries in India. Given the spatial dependence of the employment dynamics at sub-national level, this study follows ordinary least square estimation as well as spatial lag and spatial error model to understand the role of agglomeration forces on employment growth of Indian textile and leather manufacturing industries.

## **Female Labour Force Participation in India: Issues and Challenges**

**Pritam Ranjan Sahu**, PhD Research Scholar, National Institute of Technology, Patna, Bihar

**Deepak Behera**, Assistant Professor, National Institute of Technology, Patna, Bihar

Female participation in the labour market is the driver of economic growth as it expands the growth rate of the country and reduces the poverty of the nation. Around 40% of the world labour force is comprises of women and at country level around half of the country's human capitals are women. However, in the case of India. The FLFPR in 2017 was 17.5% which rose to 22.8% in 2019-20. Recent Global Gender Gap Index 2021 reveals that India stands at 140 out of 156 countries, which implies an existence of significant gender inequity. The latest PLFS report shows that only 22 percent of the female were employed as compared to 54 percent male. It raises a matter of concern and reasons behind the need to be addressed. Therefore, the present paper, which draws data from three Annual PLFS Reports i.e., 2017-18, 2018-19 and 2019-20, tries to investigate the female labour force participation in India across different age-groups, educational levels, rural-urban perspectives, sector-wise distributions and the nature of employment. The aim of this paper is to find out the possible reasons for enhancing female participation in the labour market and create a conducive environment for providing opportunities, decent and dignified work that will contribute significantly in economic empowerment and inclusive development of women.

The study found that most of the female population in rural areas participate as agricultural labour, casual labour, helper, engage, in own start-ups, construction work and migrate to other states for different other occupation. Similarly, the female population of urban area are employed in different industrial hubs, trade, hotel, restaurants, etc. Mostly, the diploma/ certificate course and post-graduation course degree holders got the highest level of employment in the last three years (2017, 2018, 2019).

### **Informal Firm Size and Productivity: Does it Solve the Employment Conundrum?**

**Lokesh Posti**, Phd Scholar, IIM Kashipur, Uttarakhand

This study analyses the debate around the ambiguous relationship between firm size and performance, which impacts the employment generation capacity of a firm both in terms of quantity and quality of employment. The case of informal firms in the view of India's colonial and complicated economic history provides an interesting context.

Policymakers in developing countries balance between supporting small firms and promoting big firms. There are potential advantages for both - big firms benefit from economies of scale and scope, whereas small firms are more flexible and adaptable to volatile economic scenarios. Firm size is among the essential factors determining firm performance, but the relationship is seldom a straightforward one, as evident from the ambiguous relationship depicted in the literature. The case of informal firms gains traction, mainly because firm size is susceptible to legal regulations that create the divide between formal and informal firms. Moreover, increasing firm size increases the firm's visibility and thus increases the detection risk for operating informally.

The complex trade-off between the small and big firms further accentuates in developing countries characterised by weak formal institutional systems like underdeveloped credit markets, corrupt bureaucracy, and inefficient legal systems. Another feature of emerging economies is the significant presence of the informal sector that is often attributed to the incapability of the formal market institutions to employ the ever-increasing workforce. The study contributes to this debate on firm size by adopting the context of informal firms as it is the informal sector that, in its finite capacity, solves the third world problems of unemployment, poverty, and inequality.

The small size of informal firms is now a stylised fact, and the low productivity levels among the informal firms are often attributed to it. Generally, the concerned literature is of limited utility in this case, as it restricts itself to the comparative analyses of formal vs. informal enterprises rather than analysing the size and performance heterogeneity among the informal firms. The direct policy implications of such empirical literature are about formalising the informal firms, thus reducing the productivity gap, with the implicit assumption that formalisation is the natural progression for the informal firms as they grow. Therefore, it can be argued that by removing barriers to growth, the size of the informal sector can be reduced. To support such claims, in the presence of evidence that shows formalisation is not an easy process, it is essential to understand the informal firm dynamics, i.e., how firm productivity changes with firm size. Which size of a firm performs better? The present study entertains such possibility by empirically testing the hypothesis at the pan-national level.

An additional underlying debate that finds its relevance in the larger question of informal firm-productivity is – whether the informal sector is a means of accumulation or exploitation. A considerable share of the informal sector, despite the high economic growth years in many developing countries, creates a conundrum for policymakers. Whether to reduce the size of informality by relocating maximum possible workers from informal to formal sector, or to support the informal sector's inherent dynamism, thus enhancing its vitality? The study addresses this aspect by analysing the quantity and quality of employment generation by the informal firms.

To analyse the dynamic relationship between firm-size growth and performance, and considering the data limitations, pseudo-panel data design was adopted by combining the three, only available, independent cross-sectional surveys by National Sample Survey Office (NSSO), spanning from 1999-2000 to 2015-16. Unlike the other NSSO surveys, which were restricted only to the manufacturing sector, these three surveys cover all the significant sectors of the Indian economy, thus providing a richer data source on the unincorporated non-agricultural enterprises in India. We used total factor productivity (TFP) as our primary measure of performance since, unlike single productivity measures, it is not impacted by the usage intensity of other ignored factors. Due to the labour-intensive nature of informal firms, we used total employment size of the firm as our primary measure of firm size. To understand the conundrum of exploitation versus accumulation we also analysed the association between wage, firm size, and firm performance. Potential issues such as time-invariant unobserved firm-level heterogeneity and simultaneity bias were accounted for by using panel fixed effects and instrumental variable regression. Our results stood robust against alternative firm size and performance measures and at the sub-sample level.

Overall, our results depict a positive relationship between firm size and productivity, i.e., productivity increases with increasing firm size, although at a declining rate. The results stand robust against alternative measures of size and performance, across all major industrial sectors. Secondly, we analysed the quantity and quality of employment generation in these informal firms. By using ‘firm-size’ and ‘average wage’ as indicators of quantity and quality of employment in the informal firms, we also found evidence for overall capital accumulation with increasing firm size among the informal firms but at the expense of labour exploitation.

To our limited knowledge, this study is a first of its kind, capturing the dynamic process of firm size and performance in the context of informal firms and inherently analysing the issue of informal employment. For policy implications, we argue that a straightforward policy of blanket formalisation for all, requires reconsideration as it cannot be a socially optimal and administratively feasible answer, at least in the short run, as our results confirm the heterogeneity among the informal firms. Moreover, the presence of a vast informal sector with big firms indicates institutional deficiencies in the form of lax bureaucratic enforcement and compliance inhibiting cumbersome formalisation procedures. This warrants specific policies on different levels – for short-run and long-run, for small and big informal firms, and for efficient and inefficient firms – which may overlap at certain levels. In such a scenario, policy-making can adopt a carrot and stick approach if required.

### **Trends and Patterns of Manufacturing Sector Employment in India: An Analysis of Major States using ASI and NSSO Datasets since the Early 1990s**

**Chandan Kumar Sharma**, Ph.D. Student, Centre for Economic Studies and Planning, Jawaharlal Nehru University, New Delhi

We find that the proportion of organised manufacturing sector in total manufacturing sector employment has increased from 20.9 percent in 1994-95 to 27.5 percent in 2015-16. Rural areas enterprises led the rise in organised sector employment share; compound annual growth rate (CAGR) of employment in the rural areas has been 4.5 percent while it is 2.2 percent for urban areas. On the other hand, employment in the unorganised manufacturing sector increased at the CAGR of 0.9 percent, mainly due to a negative CAGR of -0.5 percent in rural areas and 3 percent in urban areas. So, organised sector employment increase has been rural areas led while urban areas have led unorganised sector employment increase during the period of this study.

The significant rise in organised manufacturing employment is supported by almost every state and UTs. Also, states with higher proportions of India’s organised manufacturing employment experienced a CAGR of employment, higher than or around 2.5 percent during the period. However, for unorganised manufacturing, states with higher proportions of (more than 9 percent of India’s unorganised manufacturing), except West Bengal, employment experienced CAGR, which were lower than 2.0 percent or even negative growth rates. For example, Uttar Pradesh’s share in India’s unorganised manufacturing employment was 17.8 percent, and it experienced a CAGR of -0.9 percent during 1994-95 to 2015-16. Another state with such trends is Odisha, which comprised 9.83 percent

of total unorganised manufacturing employment in 1994-95 and experienced a CAGR of -5.75 percent between 1994-95 and 2015-16. As a result, its share in total unorganised employment decreased to 2.4 percent of unorganised manufacturing by 2015-16. All the major employer industries in Odisha experienced negative CAGR during the period. Other manufacturing, two-digit industry, which was the biggest employer in Odisha's unorganised manufacturing sector in 1994-95, showed the most significant decline in employment (CAGR of -15.9 percent) during the period. So, slow or marginal employment growth in states with high proportions of India's unorganised manufacturing is the main reason behind the modest increase in the unorganised manufacturing total employment in India.

Furthermore, states like Tamil Nadu, Gujarat, Haryana, Karnataka, Rajasthan, and Punjab have increased their shares in India's organised and unorganised manufacturing employment during the period. Other states like Madhya Pradesh, Kerala, and Andhra Pradesh have decreased their employment share in India's organised manufacturing and increased in unorganised manufacturing. Himachal Pradesh, Odisha, Assam, and Uttar Pradesh have increased their employment shares in India's organised manufacturing and decreased in unorganised manufacturing. Finally, Bihar, Maharashtra, and Delhi have decreased their employment shares in India's organised and unorganised manufacturing sector during the study period.

### **Prospects and Challenges of Reskilling amidst the Outbreak of Covid-19 Pandemic: India at the Critical Crossroads**

**Mitali Gupta**, Independent Researcher and Consultant, New Delhi

**Manik Kumar**, Assistant Professor, G. B. Pant Social Science Institute, Allahabad, Uttar Pradesh

At the current juncture when India has already been facing a huge magnitude of skills–jobs mismatch and high unemployment rates, a new set of challenges has emerged due to the outbreak and ongoing phases of Covid-19. Globally, the sectors most affected by the pandemic in terms of loss of output and employment have been wholesale and retail trade, manufacturing, real estate, business and administrative activities, and accommodation and food services. As the uncertainties relating to the Covid-19 pandemic are still hovering around the world, it is becoming even more necessary that people are empowered with the right kind of skills through timely and relevant skilling, reskilling and upskilling efforts to minimise the impact of Covid-19 on the labour market.

The process of reskilling is considered to be indispensable in building the resilience of workers and firms towards limiting the career scarring effects of prolonged unemployment and skills mismatch challenges, and to take advantage of the emerging 'in-demand' opportunities that may otherwise dissipate over time. This immediate restructuring of the education and training system needs to be undertaken at three different levels, which the present study attempts to address: (i) examine the industry-wise impact of Covid-19 outbreak on various skill categories and job profiles at a Pan-India level, (ii) identification of the 'right' kind of skill-sets which are 'in-demand' today to mitigate the challenges posed by Covid-19 on the Indian Economy and ensure preparedness for the future (employer's perspective).

Apart from a rigorous content analysis of the information relating to the impact of Covid-19 on the Indian labour market, the present study would also be based on a primary survey which would be conducted through online/telephonic mode at three levels: (i) Survey of enterprises [identification of most affected sectors as per the ILO Monitor (2020) and occupations in the target sector (in which the skills-set demanded is continuously changing and would lead to a structural change in the coming future)], (ii) Survey of individuals in the target group (identification of those who have lost jobs due to Covid-19 or are more vulnerable and susceptible to losing their jobs and thus immediately require training, reskilling or up-skilling) and (iii) consultations with the key stakeholders and policymakers on reskilling and up-skilling initiatives undertaken in context of the Indian labour market (wherein the initiatives taken under the recently launched National Educational Policy would also be assessed in the context of the findings derived in the present study).

The survey would be conducted in the Delhi-NCR region and the point of contact for the first two modes of surveys would be the HR team/professionals to obtain the information since the onset of the Covid-19 crisis. A preliminary assessment of the findings of the study suggests that by refocusing existing resources, repurposing existing curricula, making good use of the learning technologies and innovative approaches to learning and scaling up the provision of the extensive training programmes within the existing working atmosphere, the process of short-term to medium term reskilling and up-skilling of the labour force can be achieved with a great net impact on the targeted groups.

## **TECHNICAL SESSION 1.17**

### **Employment and Persons with Disability in Bangladesh: Impact and Coping Strategy during the Pandemic**

**Rifat Shahpar Khan**, Research Coordinator, Brac Institute of Governance and Development,  
Brac University, Dhaka, Bangladesh

**Lopita Huq**, Research Fellow, Brac Institute of Governance and Development, Brac University,  
Bangladesh

**Taslima Aktar**, Research Associate, Brac Institute of Governance and Development,  
Brac University, Bangladesh

**Afsana Alam**, Research Associate, Brac Institute of Governance and Development, Brac University,  
Bangladesh

Almost 80% of the world's one billion individuals with disabilities are in the working age groups, and the unemployment rate for people with disabilities is usually double or even higher than that of their non-disabled counterparts. Bangladesh was one of the first countries to sign and ratify the United Nations Convention on the Rights of Persons with Disability (UN CRPD), and was able to enact legislation, introducing the Rights and Protection of Persons with Disabilities Act, 2013 and the Neurodevelopmental Disability Protection Trust Act, 2013, to promote the dignity, rights, and access of persons with disabilities including in the employment, workplace and in other areas. This paper looks into how the pandemic has affected the livelihoods of people with various disabilities and their coping strategies. This paper also explores the impact of the pandemic on people with disabilities' employment, primarily by gender and kind of disability; it also recommends possible solutions for promoting their engagement in response efforts.

In March 2020, since the first outbreak of Covid-19 in Bangladesh and the subsequent lockdown measures implemented by countries around the world to contain the virus, the global economy has been pushed further into recession, causing many people, including people with disabilities and/or their family members, to lose jobs, income, and/or have their mobility restricted, all of which have had varying effects on this group of people. People with disabilities previously had challenges in exercising their rights, such as the right to learn new skills including income-generating skills, find work, keep their positions, and receive equal pay for the same jobs; during the pandemic, many of these rights have been further eroded by the impact of the pandemic. The COVID 19 has contributed to increase the existing employment discriminations faced by persons with disability. This paper investigates the effect of COVID 19 and explores the situation of persons with different types of disabilities during the pandemic in relation to their access to employment, loss of jobs and/or income, and its consequences. This qualitative study is based on the 'COVID 19 and disability study' conducted by Brac Institute of Governance and Development (BIGD) in Bangladesh in partnership with the London School of Hygiene and Tropical Medicine (LSHTM).

This qualitative study utilised tools such as in-depth interview guidelines (IDIs) and key informant interview (KII) to collect data of 60 individuals of an equal number of men and women with various types of disabilities belonging to three age-groups (10-19 years, 20-64 years, and 65 years and above). This study was conducted through virtual phone and video calls interviews due to the country wide lockdown at different intervals. They were asked for their consent regarding participation in the study; for children below 18 years, parental consent was also sought.

The result found that just a small percentage of the participants with disabilities were employed. Mobility, education, scope to develop skills, occasionally specific debilitating conditions, degree of disability in regard to accessibility, adaptability, reasonable accommodation, and, most crucially, the mind-set of potential employers all influenced employment opportunities of persons with disabilities. Thus, the study revealed significant differences in employment found among participants based on the types, degrees and multiplicities of disability they had.

A majority of study participants – over 63%, n=28 out of 44 participants of working age, did not have access to any sort of employment/income even before the pandemic. Over 83%, n=15 of whom had various types of jobs, mostly self-employed or work in the informal sector. These included low paid odd jobs and yet they were among the first group of people to have lost their jobs or faced a reduction in their income. Almost none of those who had lost jobs had any negotiating power with their employers. As they had lost jobs or were struggling with limited income, persons with disabilities had no options other than choosing a life of uncertainty. None of the participants with disabilities who had lost their jobs during the pandemic were able to find any alternative jobs during the pandemic. Even amidst the pandemic new jobs were created, unfortunately, a lot more concerted efforts were required nation-wide to make some of these new opportunities more accessible for persons with disabilities.

A majority of participants with disability of working age and many of those depending on their family to support them had to struggle accessing even regular support including specialised health care, and/or the minimum of food from elsewhere. The situation was even worse for families which were dependent on the person with disability as the main earning member. Moreover, persons with disabilities had limited or no options to switch jobs, but some of them had to survive on charity; some had to start begging during the pandemic. In other cases, children or adolescents with disability were forced to quit studies – thus giving up any scope to find a better job had he been able to continue his study. Despite the enactment of legislative measures, persons with disabilities are still more dependent on charity than enjoying their rights particularly in the context of employment. The impact of the loss of employment of persons with disabilities and or their family members had deserved a lot more attention side by side with consideration for safety-net support in alignment with the government's commitment toward the sustainable development goal (SDG).

It is necessary to ensure the availability of disability-disaggregated data and monitor issues related to employment of persons with disabilities in order to inform Government's decisions.

Government needs to implement the pledges made through various legislative measures. The business stimulus packages should tie up clauses for retaining persons with disabilities during any emergencies such as the COVID 19 pandemic.

## **Dynamics of Trade Openness and Employment: Evidence from India**

**Ghulam Mustafa**, Research Scholar, Department of Economics, University of Jammu, Jammu and Kashmir

**Sharief Ahmed**, Research Scholar, Department of Economics, University of Jammu, Jammu and Kashmir

The objective of this paper is to analyse the relationship between trade openness and employment in India in the post-reform period. To accomplish the objective of the study, Auto Regressive Distributed Lag (ARDL) bounds testing approach and error correction method, are used in the empirical analysis. The study has deployed time series data of employment elasticity (% change in employment divided by % change in output) of the country as the dependent variable. The study has used the conventional method to measure trade openness (Trade as % of GDP) which includes the sum of exports and imports of goods and services, measured as a share of gross domestic product, inflation (consumer prices in %), gross fixed capital formation (% of GDP), and foreign direct investment (net inflows as % of GDP) have been included in the model as independent variables. All the data are taken from the World Bank and KLEMS database. The analysis is done for the period from 1990 to 2019.

The findings of the study are, (1) The test results of the ARDL bounds test signifies the strength of the long run relationship between the variables under consideration. (2) In the long run, four out of five variables namely trade openness, services sector; gross fixed capital formation and foreign direct investment are statistically significant at one percent level of significance; (3) The coefficient of trade openness and foreign direct investment shows a negative impact on the employment intensity of growth in India in the long run; (4) The estimated coefficients of services sector and gross fixed capital formation have a positive significant impact on the employment intensity of growth in India; (5) In the short run, the first lag of trade openness is positive and significant, the first lag of services sector is negative and significant and first lag of gross fixed capital formation is also negative and significant; and (6) The coefficient of foreign direct investment is negative and significant in both the short run and long run respectively.

The error correction term is negative and significant with a value of -0.945. It indicates that any disequilibrium in the current period will likely be adjusted by 94.5% annually from the short run to the long run.

The study, through diagnostic tests, concludes that the estimated model is free from serial correlation and free from heteroscedasticity and non-normality. Using the CUSUM and CUSUMQ test, it is also concluded that the model is reliable and stable.

The findings of the study suggest that India needs to fast-track reforms and should adopt further policies towards trade liberalisation to encourage trade. It should focus on export promotion strategies and export diversification to generate employment. It also needs to fast track reforms to improve the investment climate and attract investments in the labour-intensive sectors to generate employment and also to attain high economic growth in the long run.

## Does Self-Selection Matter in Association between Employment for Women and Intimate Partner Violence? Evidence from India

**Sabitri Dutta**, Assistant Professor, Dum Dum Motijheel Rabindra Mahavidyalaya, Kolkata, West Bengal.

As WHO reports (2021), globally, one quarter of women aged between 15 and 49 face violence by their intimate partner at least once in their lifetime (since age 15). It is 33% in WHO South-East Asia region. Interventions seeking economic empowerment have been identified as a potential tool to reduce IPV against women in recent years. However, the impact of such strategy is mixed and context specific. This paper tries to examine whether engagement in employment is an effective mean to reduce IPV against women in India. The study attempts to focus on the problem of 'self-selection' in pursuing the employment. The size of the effect of employment on the partner-perpetrated violence can be biased for this problem of 'self-selection'. As presence of any statistical association does not ensure causality among the intimate partner violence and employment, any exposure to violence which can be causally attributed to employment without considering the bias in the estimates generated due to self-selectivity to work among the women, will be misleading. For that, this work uses Propensity Score Matching technique to obtain estimates of work engagement which are free from self-selection bias. The study uses National Family Health Survey (NFHS-4) Data, 2015-16. Only married women aged between 15 and 49 years (reproductive age) are considered living in rural and urban areas. This work includes only 62, 716 women for whom data on IPV is available. Cross-tabulation, bivariate and multivariate analysis are used in the study. Ordered Logit Model and Propensity Score Matching are the multivariate techniques used in the work. It is observed from cross-tabulation that in both rural and urban areas, except for sexual violence in urban India, more women among those who are in employment and receive payment are exposed to all kinds of violence. As exposure to IPV has three categories in the study, namely, no exposure, exposure to at least any one form of violence and exposure to all kinds of violence, and as they are ordinal in nature, ordered logit model is run after controlling for the potential confounders for rural and urban area separately. Engagement in employment is increasing the incidence of IPV for rural [odd ratio (OR):1.42,  $p = 0.00$ ] and urban women (OR: 1.30,  $p = 0.00$ ). The paid work also shows the same, but for rural women only (OR: 1.22,  $p = 0.00$ ). The result of PSM produces estimates free of selection bias. The mean difference in the IPV exposure from the unmatched sample for rural and urban women is estimated. For rural women, the effect size on this unmatched sample is an estimate of difference between levels of IPV exposure between those who are employed and those who are not employed. The difference is 12% and 9% for rural and urban women respectively. This means in the rural area employed women face 12% more IPV than non-employed women and for urban area, the figure is 9%. The result is significant. For paid work, the result is significant for rural women. The Average Treatment effect on Treated (ATT) is estimated using the matched individuals who fall in the region of common support. For rural area, the exposure to IPV is different for those who are employed than those who are not when the comparison is made with a group of women with similar propensities to be engaged in work. Similar result is obtained for urban women. The ATT is significantly different for rural women when they receive payment against work, but for urban women no such difference can be concluded.

## **An Assessment on Covid-19 and Employment Challenge in the Indian Labour Market**

**Himja Sharma**, Research Scholar, Birla Institute of Technology and Science Pilani, Pilani, Rajasthan

**Balakrushna Padhi**, Assistant Professor, Birla Institute of Technology and Science Pilani, Rajasthan

Covid-19 made an unprecedented impact on the global economy with a huge loss in both physical and monetary terms. Developing economies such as India were the worst hit by the pandemic and it exposed the fragile health systems of the nation. Though all the sections of the society were hit badly by it, the worst hit were the lower or poorer sections, which were mainly associated with the informal sectors. The “great shutdown” led to a halt in production activities, leading to a loss in jobs of workers.

Literature suggests that the even before the pandemic hit the nation the economy was already under stress and the pandemic just exaggerated the situation, uncovering the fragile health system. The economy was already slumping into the recession due to pile of non-performing assets and a stressed banking sector. With the pandemic hitting at such a time, it has made recovery of the country difficult and delayed. Overall, it is estimated that there was a 114 million hours’ job loss across the world, and unemployment in India peaked to a record high of 23.8 percent with the lockdown 1.0 in April 2020. Apart from this, the worst hit were the sectors such as manufacturing, construction, hotel and restaurant and mining and quarrying, which have more than 60 percent of the workers as informal workers.

It can be inferred that the job loss due to this pandemic is quite significant, ultimately affecting the overall gross value added in the economy.

## **The Opt-Out Revolution: The Determinants of Educated Female’s Labour Supply Decision in India**

**Mehr Kaur**, Ph.D Candidate, Gokhale Institute of Politics and Economics, Pune, Maharashtra

**Suddhasil Siddhanta**, Assistant Professor, Gokhale Institute of Politics and Economics, Pune, Maharashtra

In this paper we study low and lowering female labour force participation of higher educated females in India. However, we observe considerable improvement in participation rates for the higher technical educated females. We focus on the labour market attachment inducing through technical education and its associated structural development. For this, our model specification must control for the effect of increased lucrativeness of the offer (offered wage) the technically higher educated female receives in the labour market, through the own wage effect. At the same time, getting technically educated also increases the number of offers a female can choose from by making herself available for them. Thus, once we control for her own wage effect, a significant and positive effect of technical education indicates labour market attachment inducing effects. The covariates which increase the lucrativeness of the wage also increases the number of offers available to the female labour. But when we look at network advantage through the professional males in the household, we can see that network through household males can increase the lucrativeness of the offer but cannot increase the number of offers available to the female labour.

Also, if we look at “command over demand” (household expenditure on services and conveyance), we can see that command over demand can increase the reservation wage but at the same time, the nexus of such circles can also provide a premium on the offer that the female can receive from the labour market. However, such expenditure on services and conveyance could also be a management tool to increase the efficiency with which household duties can be fulfilled and thus make time for the labour market. On one hand, it can increase the lucrateness of the offer and could also be an indicator of efficiency. Thus, when we endogenize the rigidity of patriarchy or attachment to the role in a household, household expenditure on services and conveyance becomes negative, indicating that we have correctly endogenized the rigidity of patriarchy.

Also, we see the role of demand in impacting the wage as well as the lucrateness of the wage the female receives. There is another way in which the demand affects married females’ labour market decision, especially in Indian subcontinent, i.e., to aspire through her family (in-laws) and expect sanction in the household’s progress. We do so by using the exogeneous variation of a constituting element of demand, in particular the element of shock (growth), among other instruments while endogenizing the married female’s attachment to the role in the household.

And thus, we do three things, capture the demand that affects the lucrateness of the wages; introduce a measure to capture the local market structure using a very Local-Bartik type instrument, which could capture not only the shock the region receives from its neighbours, but also the sensitivity of the region toward white-collar jobs; and instrumentalise some elements (shock of cream jobs) of the conceptualised demand in endogenizing the attachment to role.

Even after controlling for attachment to role in household, and substitution effect and various other controls, technical education still have positive labour market effects. Thus, we ascertain that it is not only higher wages that explain the higher participation of technically higher educated urban married females but rather, the behavioural transitioning via the structural developing mode of education and its induced labour market attachments.

### **COVID-19: Consequences and Coping Mechanism of Households in India**

**Gunjan Kumari**, Research Scholar, IIT Bombay, Mumbai, Maharashtra

**Neha Gupta**, Assistant Professor, IIT Bombay, Mumbai, Maharashtra

**K. Narayanan**, Professor, IIT Bombay, Mumbai, Maharashtra

COVID-19 and the associated lockdown has had huge ramifications on the labour markets and has caused massive employment losses. This study is an attempt to observe the various characteristics associated with the workers who lost their job during the lockdown. We find that although each and every stratum of people got affected, the severity of the effect was not uniformly distributed and varies across demographic and occupational characteristics of individuals. It has disproportionately affected workers who are from poor background with low education and skill levels. Though the employment level has recovered for most of the workers, it has caused a huge shift in the employment arrangement.

Majority of the workers have switched to the self-employment after losing their wage employment.

We attempted to see the various mechanisms which are popularly used by households to insure against a consumption loss, due to the income shock. In doing so, firstly, we analysed the most famous mechanism majorly used by the poor households i.e., 'added worker effect'. We find little support for the 'added worker effect' during lockdown, which is justifiable considering the restrictions imposed on mobility of individuals. Secondly, we look at the role of alternative income sources (self-employment), which can help workers to overcome the income loss caused by job loss. If entry into the self-employment has implications for the wellbeing of a household, it becomes imperative to analyse the various demographic and household factors that may perhaps affect the transition of workers into self-employment. We find that due to the entry cost associated with self-employment, workers from better-off households are more likely to enter into self-employment, while the poor workers remain vulnerable to shocks.

In our study, we find that the consequences of economic shock were severe but the effect was transitory in nature. There was a large disparity in the way households were affected by the shock and their mechanism to withstand the effect of shock. For most people, income and consumption recovered to their pre-COVID level. For, the households, which faced the steepest decline in income during lockdown, by July 2020 their income surpassed to pre-Covid level. In our analysis, we find evidence of alternative income sources, such as presence of other earning members, rent, Government transfers etc. that helped poor households in smoothening of consumption, and prevented the household income to fall as drastically as the wage income.

### **The Employment Challenge in Rural India: Case of Western Uttar Pradesh**

**Chetna Singh**, Assistant Professor, School of Planning and Architecture, New Delhi

**Kanchan Gandhi**, Visiting Faculty, SPA, New Delhi/ Ambedkar University, New Delhi

This paper is part of the study carried out by the faculty and students of Department of Regional Planning, School of Planning and Architecture, New Delhi for Chhaprauli Block, Baghpat District of Uttar Pradesh. Baghpat region is economically not very diverse and is largely dependent on agriculture and its supporting industries. Within agriculture, sugarcane is the dominant crop. Traditionally, Indian villages have been spatially segregated on caste and religion basis. This has further been manifested in socio-economic divisions in the villages of this region.

This paper will detail out the socio-economic inequities in employment of two selected villages, namely, Mukandpur and Kakor Kalan. While Kakor Kalan, emerged as the "least-developed" village according to the composite development index, Mukandpur emerged as the "most developed one". Marked socio-economic stratification was seen in these villages in spite of the latter being more developed. This got reflected in the occupational structure and access to land by various socio-economic groups in these villages. The socio-economic status of Dalits and Muslims was particularly depressed as they were least able to access basic facilities such as clean drinking-water, sanitation, health

and education for their children due to their uneconomic land holding sizes. This affected the human and economic assets of certain social and economic groups in the villages. The sugar economy has led to creation of widespread unemployment in the region due to lack of diversification of the economy, which has in-turn led to the deepening of inequality between different caste and religious groups in this village. This paper highlights these disparities and offers some policy directions to achieve a more just and equitable society. The methods used in the study include, social and resource mapping of the village, focused group discussions with different communities and in-depth interviews with the Sarpanch and other socially-significant members in the village. Secondary data were collected from various offices in the block and from the Census of India.

### **Impact of Economic Disruptions Caused by COVID-19 on the Sectoral Employment in India**

**Sushil Kumar Rai**, Assistant Professor, Institute for Studies in Industrial Development, New Delhi

**Akhilesh Kumar Sharma**, Assistant Professor, Institute for Studies in Industrial Development, New Delhi

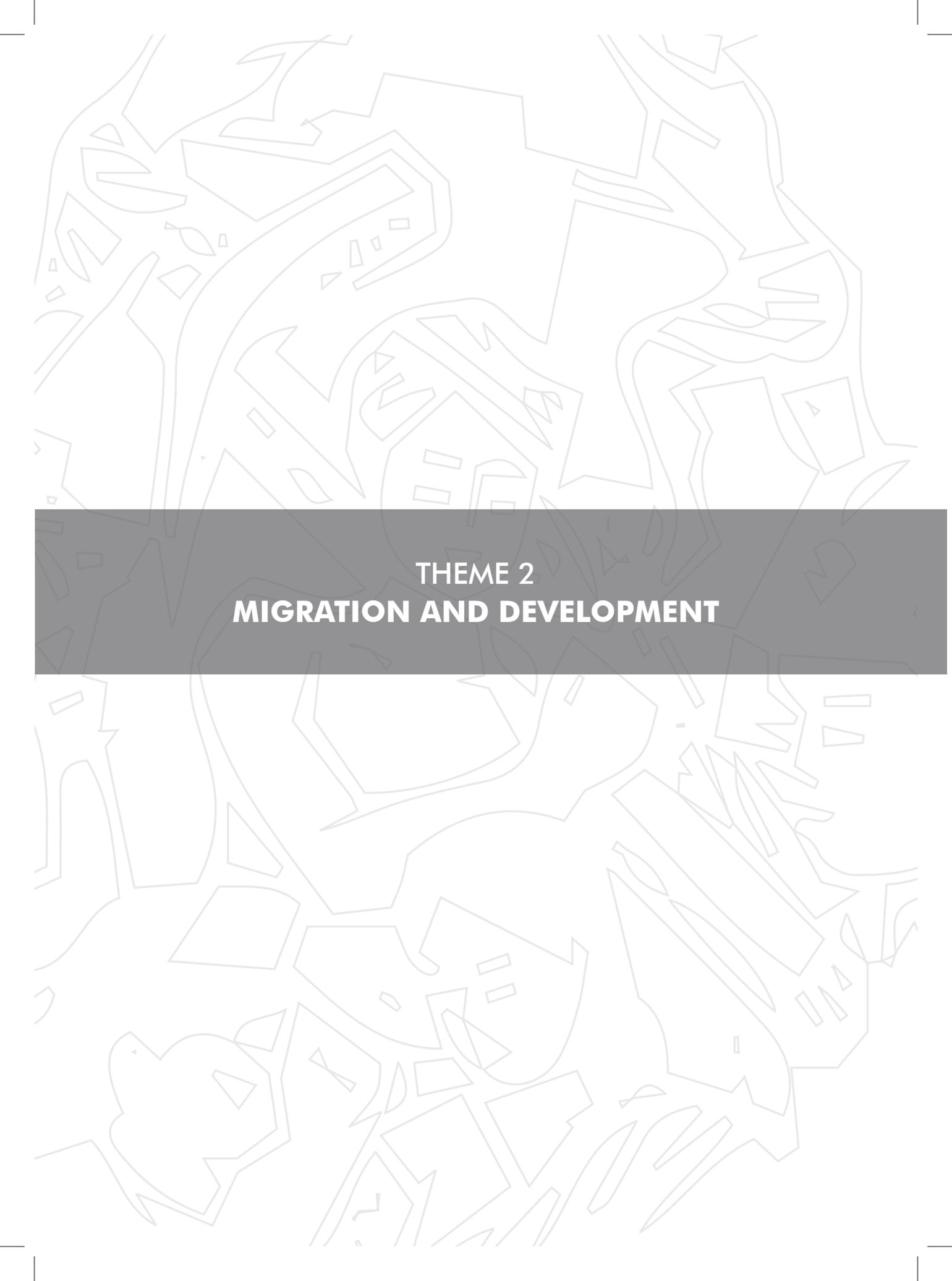
The present study aims to understand the impact of economic disruptions caused by the pandemic COVID19 on the sectoral and occupational composition of employment and factors affecting such changes. The study is based on secondary data that has been obtained from multiple sources. Data on quarterly industrial shares in GVA has been collected from Ministry of Statistics and Programme Implementation (MOSPI), Government of India. The monthly data of unemployment across region, trends of employed person in rural and urban areas across occupation, and sectoral quarterly data of output and employment has been obtained from Centre for Monitoring Indian Economy (CMIE). For understanding the factors affecting changes in sectoral composition of employment, a descriptive analysis approach was applied for data analysis. Further, sectoral employment elasticities has been estimated to compare the employment generation capacity of different sectors between pre-COVID19 and post-COVID19 period.

Our findings show that there is significant variation in employment across sectors, regions and occupation. The impact of lockdown was much deeper for some industry where physical involvement is required to complete the task like hotel services, construction, manufacturing, and mining and quarrying. Since activities in agriculture and allied sectors were allowed during lockdown, there is almost no impact of lockdown on the agriculture, forestry and fishing sector. The second quarter (2020-21) performance of these industries are reflecting a sign of recovery lead to a V-shaped recovery in Gross Value Added (GVA). In urban areas, the impact of lockdown was more severe than rural areas across all the occupations such as business, salaried employees, small traders & wage labourers, and farmers. Among all occupations in both rural and urban areas, small traders and wage labourers are affected very intensely and the intensity was comparatively greater in urban areas. This is because of nearly closing down of economic activities in manufacturing industry, construction, and hotel services which are largely executing their activity in urban areas.

On the sectoral basis, the worst impact was realized by the real estate and construction sector followed by the service sector and manufacturing sector. In such sectors comparatively more physical involvement of labour

force are required to complete the production process therefore the policy of lockdown has affected harshly to these sectors. Between these sectors the condition of employment was worse in real estate and construction sector because the shift of labour force on online mode cannot be applied in construction business to complete the production task. Almost all the sectors has registered a V-shaped recovery after the removal of lockdown in employment and output except the manufacturing sector which is showing a L-shaped recovery in terms of employment while V-shaped recovery in output. The L-shaped recovery in manufacturing sector for employment is verified by the estimated value of employment coefficients which become negatively inelastic during post COVID period. This indicate decrease in employment generation capacity of this sector that mainly happen because of mechanization of production activity along with the promotion of Industry 4.0 by the government. These findings clearly indicate that the pace of recovery across sectors/industries neither same nor V-shape. It infers that some of the sectors/industries are still facing either lack of demand or shift towards the capital intensive technique that resulted in less hiring by these sectors/industries.

The study suggests that in uncertain situation like the COVID19 pandemic, lockdown measures should not be introduced suddenly. Workfare schemes similar to MGNREGA should be introduced in urban areas. Appropriate social security measures should be designed to protect informal workers at the time of pandemic or any external shock to the economy, which may reduce the plight of workers from urban to rural areas and help in the revival of the economy.



**THEME 2**  
**MIGRATION AND DEVELOPMENT**



## KEYNOTE PAPER

### **Migration and Development: Global Governance during a Crisis**

**Dilip Ratha**, Head, KNOMAD and Lead Economist, Migration and Remittances Social Protection and Jobs Global Practice, The World Bank

This paper summarizes the main drivers and impacts of migration, discusses the impacts of the COVID-19 crisis and the Ukraine crisis on migration and remittance flows, and indicates how global governance of migration can be strengthened and cross-border remittance flows facilitated. In 2020, there were around 281 million international migrants and refugees, with migrants outnumbering refugees by 9 to 1. During the COVID-19 crisis, the stock of international migrants declined. Remittance flows, however, proved to be resilient, surpassing flows of foreign direct investment and official aid. Most host countries provided social assistance, access to healthcare and vaccines, to migrants. The COVID-19 crisis also revealed that working remotely is possible in many sectors of the economy. Digital payments partially alleviated disruptions to flow of money. Just when the economies were starting to recover from COVID-19, the Russia-Ukraine conflict erupted. So far, 4 million Ukrainians have left for Poland and other countries. Remittances to Ukraine are expected to rise by over 20 percent in 2022. However, remittance flows to many Central Asian countries are expected to decline significantly. In the future, the COVID-19 crisis and the Ukraine crisis will affect the global governance of migration. Destination communities experiencing large influx of migrants (or origin communities experiencing return migration) require external financial support for providing social services. There is a need to create a Concessional Financing Facility for Migration (CFFM) to scale up support for migration programs from millions to billions. In 2018, a Global Compact on Refugees (GCR) and a separate Global Compact on Migration (GCM) were adopted to manage surges in refugee and migratory flows. There was also progress in providing financing support for hosting refugees through a new Global Concessional Financing Facility (GCFF) for refugees and through a IDA19 window. Financing support for managing (economic, voluntary) migration, however, has been lacking so far. So far, progress on the Sustainable Development Goals (SDGs) target to promote safe and regular migration has been slow. Indeed, reducing the fees on remittances (SDG indicator 10.c.1) by even 2 percentage points would translate to \$1.2 billion of savings, annually, for international migrants from low- and middle-income countries. Unfortunately, the recent exclusion of Russia from SWIFT has revealed the vulnerabilities of the international payments system, which are likely to become multipolar in the future. The sanctions have also raised skepticism about programmable currencies. India with its edge in IT and fintech capabilities could potentially benefit. At the global level, a social-impact and not-for-profit-alone remittance platform is needed to facilitate flows and harness the benefits of remittances.



## **TECHNICAL SESSION 2.1**

### **Diverse Perspectives on Human Mobility: Between Normative and Political**

**Achin Chakraborty**, Professor of Economics and Director Institute of Development Studies,  
Kolkata, West Bengal

The word ‘migrant’ usually evokes, for good reason, images of people at their most vulnerable. Policy documents and reports of international agencies, on the other hand, were full of optimistic sentiments around international migration until the oil shocks of 1973. This was followed by doubts and concerns over issues such as integration in destination countries. Many countries of the North were increasingly tightening their immigration policies and by the end of the last century, the optimism in migration-development nexus almost vanished. The new millennium marked a revival of optimism following the remittance boom and the surge in related research. The normative perspectives to illuminate the complexity of what may be generally called human mobility have therefore had tangled connections with the swings in country-specific policy positions, the connection of which, in turn, with empirical migration studies is also rather tangled.

The kind of optimism that resurfaced in academic and policy discourses since 2001 culminated in such documents as UNDP’s Human Development Report 2009, which takes an approach based on individual freedom – in the sense of either opportunity or capability. When an individual chooses to move, her capability set is supposed to expand. It has often been observed that the majority of migrants, far from being victims, tend to be successful in the narrow sense of income gain, even though their exposure to risks increases manifold and their freedom in several dimensions remains restricted. Following this perspective there is no reason why the direction of policy in the origin country/sub-national entities should be towards ‘holding back’ the prospective out-migrants. The rise in anti-immigrant sentiments in destination countries, however, has ostensibly led to a kind of compromise position that migration is most likely to benefit all if the ‘policies are right’. However, perspectives on the rightness of policies seem to differ substantially between HDR 2009 and, say, the World Bank Group’s Policy Research Report ‘Moving for Prosperity: Global Migration and Labour Markets’ (2018). The ‘right policies’ in the latter end up in newer forms of regulations keeping the need of the market in mind, so that migration can be harnessed as a source of controlled labour supply, by promoting initiatives such as temporary migration programmes. When demand exists, as the argument goes, governments should consider allowing legal but temporary entry to meet those shortages—in sectors like agriculture, construction, and tourism, where seasonal and short-term jobs are the norm. Temporary migration programmes are thus seen as benefitting migrants and native populations alike “by divorcing labour market needs from permanent migration”. In this paper we bring out the implications of the differences between these normative perspectives and contrast them with an empirical political economy approach which is needed to understand why the governments

respond to the ‘problem’ of immigration (or in-migration) as they do, deviating from the normative perspectives articulated by academics and international agencies. We argue that a judicious combination of arguments drawn from these diverging perspectives may help us understand the policy issues better.

### **Roots of Vulnerability: The Political Economy of Circular Labour Migration in India**

**Deepak K Mishra**, Professor, Centre for the Study of Regional Development, School of Social Sciences, Jawaharlal Nehru University, New Delhi

Migration is generally analysed in the mainstream literature as a matter of voluntary choice made by individuals and households who decide to migrate in their enlightened self-interest. In recent literature, migration is often celebrated as a market-mediated path out of poverty traps. In the backdrop of increasing inter-regional disparities, internal migration is conceptualised as a spatial trickle-down effect that links the relatively less developed regions with the fast-growing, prosperous regions in a virtuous spiral of diffusion of growth. Such conceptualisations uncritically celebrate the process of neoliberal growth as a path to prosperity, and the existence of precarious labour relations that fails to provide decent jobs and a decent life to the working classes is either overlooked or is rationalised as one of the advantages of a developing economy under global capitalism. Such generalisations on the positive outcomes of labour migration often fail to account for the empirical findings on the diversity and contradictions in migration outcomes that have been noted in numerous micro studies. The conditions of ‘jobless growth’, rising unemployment, persistent informality, increasing precariousness of informal workers, and the erosion of social security even within the formal sector point to the broad context within which a substantial section of migrant workers eke out a living. The mass exodus of migrant workers during the early days of the Covid 19 pandemic and the extreme vulnerability that they faced during the lockdown was a clear manifestation of the actually-existing conditions of work in contemporary India.

This paper presents a political economy perspective on internal migration in India, particularly focusing on the nature of vulnerability of a section of migrant workers. A class-theoretic understanding of the migration process recognises the fundamental power asymmetry between labour and capital and links the ways different classes of labour have become mobile in India. Based on multiple rounds of field surveys in a ‘migration-prone’, rainfed region in interior Odisha, it traces the conditions under which different agrarian classes migrate to the urban informal economy. The results point to the mechanism of debt-induced seasonal outmigration cycles that, while creating alternative sources of survival during the lean season for the landless and marginal farmers, tie them to a life of perpetual indebtedness. This is supplemented by findings from a survey of circular migrants in the NCR region that captures the precariousness of migrant livelihoods. Despite the relatively higher earnings at the destinations, the consumption-remittance patterns and the living and working conditions of the migrant workers point to the diverse ways vulnerabilities are reproduced on a daily basis. The paper argues that circular migrants, through their survival strategies, essentially subsidise the cost of labour for capital through a process of self-exploitation.

## Impact of COVID-19 on the Lives of Migrants at Destinations: A Study of Migrants from Uttarakhand in Delhi<sup>1</sup>

**Rajendra P. Mamgain**, Professor & Head, Department of Economics, Doon University, Dehradun

**Balwant Singh Mehta**, Senior Fellow, Institute for Human Development, New Delhi

Historically migration played a crucial role in the development process of human beings. They generally migrate from backward areas to relatively developed areas for better opportunities including employment and livelihood security. Quite often, such migration suffers with significant externalities due to its negative impact on demography and general development of migration-prone regions. This is also true in the case of mountain areas of Uttarakhand, which witnessed acceleration in migration during last two decades despite significant improvements in access to infrastructure. The nature of migration has also changed from temporary to permanent and that too from individual to migration with families. Such migration is mainly for remunerative livelihoods and better quality of life. The formation of separate state of Uttarakhand and subsequent remarkable economic progress could hardly ameliorate the magnitude of “push” induced outmigration due to its lopsided economic development in favour of its plain areas. It is often assumed that migration tends to improve the overall wellbeing of migrant workers/households both at their places of origin and destination. However, with the predominance of informal employment as a source of livelihoods and lack of social security, the working and living conditions and quality of life of a large segment of migrants at their places of destinations is subject to testimony. The COVID-19 pandemic has exposed such vulnerability of migrants at their destinations, forcing many of them to return to their origins, and Uttarakhand was no exception. However, a large number of migrants stayed back at their destinations with their varied experiences of coping up with the Covid-19 pandemic situations.

This paper is an attempt to understand the disruptions in the lives and livelihoods of migrants from mountain regions of Uttarakhand who stayed back in Delhi during Covid-19 pandemic. Based on a sample of 400 households of migrants from mountain areas of Uttarakhand residing in 13 localities in Delhi, the paper attempts to examine the impact of pandemic on their livelihoods and coping strategies besides analysing their socio-economic characteristics and perceptions of wellbeing.

The findings show that three-fourths of migrants migrated to Delhi during last two decades. Six out of ten migrant workers work in unorganised sector, and are engaged mainly as salaried workers in wholesale and retail trade, hotel and restaurants, manufacturing and construction sectors. Though their average income is quite low at Rs. 16,449/-, majority of them reported improvement in their well-being after migration. Covid-19 had a widespread impact on these households as over three-fourths of them experienced job losses of at least one person during the pandemic. About one-tenth suffered with Covid-19 infection and incurred substantive expenditure on their treatment. The average amount of earnings forgone among affected households during Covid-19 was quite high at Rs 71,466/-. They used

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1 This paper is based on a study of “Migration, Wellbeing and Impact of the Covid-19: A Study of Uttarakhand Migrants in Delhi” under the aegis of S.R. Sankaran Chair (Rural Labour), National Institute of Rural Development, Hyderabad.

their own savings and also took both institutional and non-institutional loans as a survival mechanism. Around one-tenth among them had outstanding debt. One out of three migrants also reported that they went to their native places due to loss of jobs or earnings and fear of corona virus. But, even after the state government's several claims, three-fourths of them were forced to return to Delhi due to lack of any meaningful livelihood opportunities, government support and other infrastructural issues at their native places. On the other hand, one out of two migrants reported they received government assistance in the form of free-ration, free-meal, and transport facilities in case of health emergency during the pandemic in Delhi. Probit regression results clearly show that the likelihood of facing livelihood related vulnerabilities during any adversities like the Covid-19 pandemic is more among less educated, and those engaged in informal jobs in trade and hospitality industries.

The pandemic has severely affected the education of migrants' children. About three-fourths of their children dropped out from school and colleges during the COVID-19, mainly due to lack of online classes, internet facility, poor internet connectivity, smart phone and high cost of mobile data recharge.

As regards assistance from the government, nearly 90 per cent received free ration and some received assistance through Jan Dhan account, old age pension, free gas cylinder, and counselling and guidance. Those who did not get any government assistance was mainly due to lack of ration card, and other eligibility documents. Among those who returned to their native places, around one-fourth received some assistance from local government in the form of work in MGNREGS and free rations.

As majority of migrants from Uttarakhand are relatively better educated, they revealed several challenges for staying back in their native places. Prominent among these include lack of employment and livelihood opportunities, education for children, medical facility, road connectivity, and lackadaisical approach of government institutions to guide and support business opportunities. They believe that if these challenges are addressed by the government duly supported by its time-bound action plans, a large number of "push-induced" outmigration will not reoccur in future. A minuscule four percent of migrants though intended to return to their villages but are sceptical about the availability of support from the government for their livelihoods. The paper offers useful policy suggestions.

## **Student Migration for Higher Education in India**

**S. Chandrasekhar** (Corresponding Author) Indira Gandhi Institute of Development Research,  
Mumbai

**Abhiroop Mukhopadhyay**, Indian Statistical Institute, New Delhi

**Anjaneya Reddy**, Indira Gandhi Institute of Development Research, Mumbai

**Ajay Sharma**, Indian Institute of Management, Indore, Madhya Pradesh

This paper is a contribution to the literature on student migration, a relatively under researched issue in the Indian context. We analyze information submitted by the institutes that sought to be evaluated as part of the National Institutional Ranking Framework. This data set has information on the number

of in-state and out of state students enrolled in each institute. Since the sample we analyze is that of the top ranked institutes the proportion of out-of-state students is probably higher than if we considered all institutes. The proportion of out of state students is higher in management institutes. While colleges cater primarily to the local area and in-state-students, the elite colleges, however, attract a larger share of inter-state migrants. Among the correlates of share of inter-state migrant students enrolled in colleges includes university affiliation, management type, and location (rural or urban and state). The paper concludes by outlining how rich administrative data can address key data and the resultant knowledge gaps on migration for higher education in India.

## **TECHNICAL SESSION 2.2**

### **Women and the Rural Household in Circular Migration: Subsidizing Low Wages and Providing a Safety Net**

**Dev Nathan**, Institute for Human Development, New Delhi; GenDev Centre for Research and Innovation, Gurugram, Haryana and Centurion University of Technology and Management, Odisha

While much of migration analysis deals with the migrant worker, the recession of 2020 and 2021 set off by the pandemic shock and the Indian governments' refusal to provide adequate social security, leading to millions of migrants trekking, even walking hundreds of kilometres, back to their rural homes, forced attention on the rural households' role in providing social security in a historically unprecedented recession. This paper deals with the role of the household in migration, particularly low-wage circular migration (Srivastava 2020 and Datta 2020) where migrants return to their rural origins not only at the end of but also regularly during their working lives.

With circular migration being largely masculinized (Datta 2020) the neglect of the household also means the invisibilization of women's care work (Lerche and Shah 2018) in the process of migration. Even the stark visualization of return in the recession focused on the travails of trekking and walking back and did not carry on the narrative into the rural households into which the migrants returned.

The paper looks at the role of the household in two different situations. First, in the 'normal' working of the systems of production by subsidizing low wages and, second, in the crisis situations of recessions by providing a safety net.

In neo-classical economic analysis the household figures in migration decisions to diversify its income sources (Ellis 1998) and to spread risks (Lucas and Stark 1985, cited in Srivastava 2021). That is a supply-side analysis of the factors leading to the supply of such low-wage migrants. On the other hand, a socially-embedded analysis points to the articulation of different modes of production, of capitalist wage labour with petty peasant production (Wolpe 1980, Meillasoux 1981, and de Janvry 1986) as a manner in which capital is able to reduce wages to the level required for merely the immediate reproduction of labour power, while leaving the costs of other dimensions of social reproduction to be borne by the rural households of left-behind women and elders. A contemporary analysis of global production points out that the profits from this lowering of wages are captured by headquarter firms from the global North through the operation of monopsony in contract manufacturing in the global South (Nathan, et al, 2022).

The second situation is that of the collapse of migrants' urban jobs in recession. In the absence of or inadequacy of state provided social security, what we have seen in India is the role of rural households of left-behind women and elders in providing a safety net (Nathan and Rahul, 2022). This must be understood as deliberate policy of not using available fiscal space but putting the burden of providing a safety net on rural households, as was pointed out in the late 1990s recession in South-east Asia (Nathan and Kelkar 1999 and 2012).

The paper concludes with some reflections on the role of the household in economic analysis.

## **Haryana State Employment of Local Candidates Act, 2020: Implications for Migration and Development**

**Amrita Datta**, Department of Liberal Arts, IIT Hyderabad, Telangana

In recent years, several Indian states have enacted laws prioritizing employment of the *local* population in the private sector. One such state, Haryana, passed the Haryana State Employment of Local Candidates Act, 2020 (Haryana Act)—reserving 75 per cent jobs in the private sector for local residents—in March 2021, and the Act was notified by the Haryana Government in November 2021. The Act came into effect in January 2022, but in February, the Punjab and Haryana High Court passed an interim stay on the law. Subsequently, the Haryana Government moved the Supreme Court, challenging the High Court’s Order, and at the time of writing this paper, the matter remains sub-judice.

Drawing on Myron Weiner’s work—highlighting the tensions in the territorial and ethnic conceptions of the *local*—this paper locates the Haryana Act in the context of nativism and the migrant-native divide in India. It examines the Haryana Act, against the backdrop of similar legislations in the country, and discusses its constitutional violations and validity, and its implications for inter-state migrant workers and the industry. In line with the migration and development literature that shows that, in economic terms, migration is hugely beneficial—a triple win—for destination regions, source regions, and migrants themselves, the paper argues that governments attempting to introduce policies to curb migration need to be better aware of the welfare losses such policies entail. In particular, the applicability of the law *only* to migrants with a monthly wage of less than 30,000 rupees arbitrarily creates two classes of migrants, and in turn, discriminates against the low wage predominantly blue-collar migrant workers. The paper concludes that domicile-based restrictive employment policies that pit local workers against migrant workers simply haven’t worked in the past. Instead, enhancing human capital by the provision of quality education and skilling the workforce, along with an expansion of urban development programmes that benefit *all* workers may be a surer pathway for inclusive development, in tandem with the spirit of the Indian Constitution.

## **Labour Migration and Development: Reflections on India’s Covid Economy**

**Biswajit Chatterjee**, Former Professor of Economics, Jadavpur University, Kolkata, West Bengal

Labour migration is a multi-faceted and complex phenomenon which is observed in the process of economic development of nations, be developing or developed. Binaries like voluntary–forced, legal–illegal, internal–international, etc. appear in vast literatures on migration studies where the dichotomous migration traditions with differences in conceptual, theoretical and methodological standpoints have been discussed, although in many contemporary discussions, the boundaries between categories have been blurred.

The phenomenon of migration can hardly be isolated with respect to its nature, pattern and causes. Labour migrations are generally caused by the combined effects of both push and pull factors, and it is indeed, quite difficult to discern the role of the two.

Although the earlier theories of migration in the literature of development economics largely focus on internal migration of labour within a nation, and internal migration exceeds international migration in magnitude, it is increasingly recognized the importance of integrating internal and international migration while discussing displacements of labour and livelihoods in the process of development. According to Census 2001, 30% of the Indian population comprises of internal migrants, and the physical migration of labour from rural to urban areas is an important strategy adopted by the households to diversify their income streams and improve their livelihoods. Like in other developing economies, labour migration within India is in effect a relocation of residence for a specified duration and for various reasons, and it affects the lives of the family of the migrants both at the place of origin and destination. In this paper, we shall consider the consequences on internal migration of workers following the pandemic driven lockdown clamped on the economy in March 2020.

The massive displacement of migrant workforce of the country following the announcements of lockdowns in the covid-19 affected economy of India, has exposed the inadequacies associated with the levels of living of these workforce and called for immediate and urgent invention of the Government.

The migrant workers, who had been employed in some form in different states even before the outbreak of the pandemic, lost their livelihood supports from their employers, were forced to face tremendous uncertainty, and naturally tried to go back their respective homes in other parts of India. Large-scale distress and exodus after the lockdown were experienced by short-term and long-term circular migrants i.e. those who still considered their areas of origin as their primary or secondary homes.

One should note that the genesis of migrant workers in different parts of the country and their informal nature was not contributed by the pandemic or the lockdowns, but by the factors governing Indian economy even prior to the outbreak of such pandemic and lockdowns. What the Covid-19 crisis and the subsequent measures announced by the Government did was to bring these migrants to the streets and made them displaced, distressed, and vulnerable. The crisis further revealed the fact that the existing health infrastructure, mainly, in predominantly rural districts of states (where a majority of migrant labourers returned) had been inadequate in dealing with the increasing number of COVID-19 cases. Additionally, problems of household crowding, in the households of migrant workers, belonging to socially deprived and economically marginalised sections, lack of hand sanitizers and loss of job and wages, - all had pushed the returnees to a highly vulnerable position at the place of origin.

Therefore, to argue that only adequate social protection policies be adopted to cover them would be missing the issue, because the prevailing social protection policies were not effective enough to prevent the displacement and misery of such migrant workers. There was an associated macro problem of augmentation of unemployment for all types of workers. Such acceleration in unemployment was due to the interplay of number of factors, the most prominent being the paucity of aggregate demand. Therefore, one should try to initiate macroeconomic policies to supplement the micro-economic measures. There is also an urgent need for the skill mapping of the migrant men and women workforce – both new and old types- and register them for skill-based job opportunity, both in rural and urban areas in different states. Further, there is a need to expand public investment in creating infrastructure

– rural roads, school building, health centers in rural areas – so as to create immediate employment opportunities for these displaced migrant workers on a large scale, while at the same time creating the base for a growing healthy India in the medium to longer runs.

Thus, policy measures include immediate augmentation of domestic demand among the poor households, expansion of the fiscal space of the government, and planning for growth creation and asset expansion at the micro level supported by public investment at the macro level. Only when such complementarities between the micro and macro policies could be worked out, we could find ways for moving ahead with a humane face.

### **Migration of Landholders and Development of Rural Regions**

**Brajesh Jha**, Professor, Institute of Economic Growth, Delhi

Following the lock-down of economic activities, the pictures of unorganized (migrant) workers walking across the rail tracks and empty roads, carrying their scanty belongings, will remain in our memory for more time to come. The recent round of National Sample Survey (NSS) on migration also shows the significant increase in interstate migration of rural-urban kind. The rural migrants were traditionally landless, but in recent decades many of them are land-holders. In fact, out of total holdings of around 140 million, around 70 percent of the land-holders are of marginal size with less than one hectare of land; in some states like Bihar, more than 90 percent of holdings are marginal. The land-holdings of this size are often not viable and the land-holders have to depend on multiple activities for their livelihood. The present study discusses some of these issues with the recent NSS round (77<sup>th</sup>) on Situation Assessment of Agricultural Households in Rural India, 2019, and similar earlier rounds.

The statistics show that the meagre income of landholders (farmers) depends on multiple (livelihood) activities. An average landholder earns from his own premise by cultivation of crops, livestock, and also by performing non-farm business. They (land-holders) also earn wage income by working in others' premises (farm and non-farm). An average land-holder thus depends on many on- and off-farm activities. The land-holders' dependence on activities is largely influenced by the size of land they possess. Agriculture (cultivation of crops and livestock) has not remained the principal source of income of an average landholder with less than one hectare of land (marginal). Often their off-farm earnings exceed the earnings from farm sources. The wages earned from other's premise account for more than 45 percent of the household income of this category of landholders. The land holders' dependence on the wage component of farm income decreases as the size of (land) holdings increases. Wage accounts for around one-third and one-fifth of the household income of small and semi-medium farmers respectively.

These groups of landholders possibly migrate the most in paucity of work opportunities around their vicinity. The same is evident with the high share of remittances in these categories at the country level. Migration of land-holders with the present prohibition on the lease of agricultural land in most states adversely affects agriculture production. The institutional arrangements that improve the transition of land-holders from agriculture to non-agriculture activities may be encouraged.

Though agriculture is the principal source of income of land-holders possessing holdings beyond one hectare of land, their meagre income is earned from many (on- and off-farm) activities. Consequently, it is not surprising to note that these farmers' children do not want to continue in agriculture. In fact, in an economy where many people still depend on agriculture, the development experiences suggest an important role of non-farm business in farmers' income. However, the NSS Situation Assessment of Agricultural Households of different rounds shows that the share of non-farm business in average farmer's income is not only low (6 percent in the year 2018-19) but it has also decreased from 11 to 8 and 6 percent in 2003, 2013 and 2019 respectively. Though the above presentation is for an average situation of the country, it is particularly bad in certain states.

The bulk of the rural migration (for work) in earlier years was in nearby places, but following the increased concentration of economic growth, often the land-holders do not get work in their proximate places and migrate to distant places. As a consequence, some districts/ states emerge as the major contributor to the out-migration in the country. The NSS recent round on migration also reveals an abrupt increase in inter-state migration in the country. A reversal of this trend requires decentralized development, development of many growth centers, adequate growth of manufacturing, improvement in the rural infrastructure, and similar other initiatives. The problem of distress migration in the immediate future can be reduced by the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) kind of rural work programme. The MGNREGS besides providing wage income to workers also creates the rural assets for improvement of rural regions that may check some of the distress-induced migration in many parts of the country.

### **Migration in the Global South: African Students, Challenges and Strategies of Survival in Bangalore, India**

**Shambhavi Bhushan**, Ph.D. Student, University of Florida, Florida, USA

Living through the challenges of the 'international-quality' education in Global South that becomes the gateway to the second economy, the article highlights the tactical everyday living, and spatial formation of African migrants that study, work, and live in the hope of better economic opportunities and enhanced social status in Bangalore, the Silicon Valley of India. Drawing upon three months of ethnographic fieldwork with African migrants in the city of Bangalore in 2021, the paper elucidates the lived experiences of the Africans that survive through the incompetency of the substandard private institutions, opportunistic agents, revenue-centric exploitation, bureaucratic and administrative inefficiency, and cultural isolation of an already racialized and marginalized African migrants. They adopt strategies like strong network ties, tactics of survival, negotiations, and deliberations in the journey of finding new homes and new hopes. In the precarious conditions of ill/legality, and im/mobility, the emergent "migration infrastructure" aids the students to commence entrepreneurial self-actualization through different endeavors like exporting clothes and technology, food delivering, hair braiding as well as becoming drivers of privatization in India by bringing in new students from their respective countries. Focusing on the south-south perspective, often overshadowed by south-north mobility, I ask- caught in the nexus of educational and institutional neglect and harassment, how do category of 'student-migrant' explore new pathways to negotiate and take advantage of the very system that perpetuates neglect and trickery on them?

## **TECHNICAL SESSION 2.3**

### **Outsourcing or Contracting out Exploitation? Modern Slavery and Gender Issues in Sugarcane Harvesting in India's Maharashtra**

**Sukhpal Singh**, Professor, Indian Institute of Management, Ahmedabad, Gujarat

Migration of farm workers is a recognised reality both globally as well within India and most of it is circulatory migration. The major aspects of decent work and gender deficit in value chains include: gender ratio of workers, gendered wage levels, gendering of tasks, lack of equal opportunities, poor support for childcare, gendered vulnerability of employment, poor representation of women in leadership positions, gender-based discrimination and socio-cultural context of unpaid care and domestic work. Even certain systems of payment of wages like piece rate work led to gender exploitation, and certain categories of women workers like temporary, casual and migrant workers are more exposed to gender based exploitation as they are less aware of their rights and suffer from power imbalance with their male supervisors. Migration, including circulatory migration, is another important aspect of such work.

Though value chains are seen as a route to decent employment as proposed by ILO and many other global development agencies, the evidence is not forthcoming. Sugarcane industry in India heavily relies on manual harvesters to carry out labour intensive activities as part of its outsourcing strategy since the 1970s as does the Indian export grape industry since the 1990s. In grapes and sugar, the labour outsourcing is so well established now that farm owners and grape and cane growers just watch the harvesting of their crops by professional teams brought into the farm by the buyers' (grape exporters and sugar mills) agents or service providers.

When seen in the perspective of value chains and decent work, most of the migrant worker engagements are more of modern slavery rather than decent work. In this context, this paper examines the state of work and livelihoods of the sugarcane harvesting workers in Maharashtra though it has been documented for a long time now starting with Jan Breman's work in the 1970s in Gujarat. This paper examines forced labour, child labour, gender issues, gendering of tasks, and forms of gender discrimination experienced by sugarcane harvesting workers in Maharashtra in general, and women workers, in particular, and implications of the same for (women) workers livelihoods from a modern slavery and decent work in value chains perspective. It analyses the terms of engagement of (women) workers, contractual arrangements and wages, recruitment systems, and work patterns and protection at places of work. It particularly examines the role of labour contractors to understand why workers continue to carry on this work season after season despite exploitation by sugar mills and contractors. It finds that the associational power of the migrant workers is missing due to lack of their organisation. Even structural power is not usable as the contractors and mills together bond them with advances before the season itself. It lays bare the mechanisms of their exploitation and precarious livelihoods generated out of such bondage with sugar mills and the intermediaries. It makes a case for certain regulatory and agency measures to protect and improve the working conditions and livelihoods of migrant workers in very high value crop based large sugar industry in the state and in India.

## Measuring Migration related Movements from Daily Mobility Data

**Nishant Chadha**, Fellow and Head - Projects, India Development Foundation, Gurugram, Haryana

**Shanmitha Raghu**, Research Associate, India Development Foundation, Gurugram, Haryana

We merge a high frequency daily mobility dataset from Facebook with the decade old migration data from the 2011 Census of India for all the districts of India for the period March 2020 to September 2021. The purpose is to ascertain patterns of migrant mobility during the COVID pandemic in India. We find that the two datasets are significantly positively correlated implying that mobility &ndash; even during the baseline before the pandemic &ndash; is higher along district vectors more connected by migration. Thus migration partially drives mobility. Unconditionally, mobility in India fell during the national lockdown in April to June 2020 and the second wave of COVID in February to May 2021. However, the elasticity of daily mobility to the stock of migrants peaked during these times. Thus daily mobility between districts during the times of crises is driven by migration. Firstly, by migrants returning to their home districts and then as the crises eases by them returning to their destination districts. Finally, we study the bi-directional mobility between districts. Our findings show that during &lsquo;normal&rsquo; times mobility along a vector (a pair of districts in this paper) is the same in both the directions. That is, net mobility is close to zero. However, during crises we get one directional movements of migrants &ndash; when they return to their home districts. Thus the net mobility increases &ndash; in the direction of the &lsquo;exporting&rsquo; district in the pair. That is in the direction of the district which sends more migrants to the other. Our paper is the first one to use a high frequency dataset to study mobility between districts in India driven by migration. Our findings also have significant use in policy making regarding long distance movements during crises by making the nature of these movements clear to policy makers.

## Country Roads, Take me home...<sup>2</sup> Migration and Employment through a Gender Lens

**Nisha Srivastava**, Visiting Professor at the Institute for Human Development, New Delhi and formerly, Professor, Department of Economics, University of Allahabad

**Pratikshya Priyadarshini**, Senior Programme Officer, AALI, Lucknow, Uttar Pradesh

It is paradoxical that while globally women's work force participation rate (WPR) has increased, in India there has been a reverse trend. Decline in fertility, greater enrolment in schools, better transport, enhanced child care, better infrastructure, and changing mindsets are some of the factors that have contributed to more women entering the labour market in several countries. In India, on the other hand, there has been a near free-fall, particularly in rural areas in the work participation of women. Various studies have shown worsening opportunities for employment and earnings for both men and women, particularly in rural areas. With the pandemic, the situation has only grown worse.

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<sup>2</sup> These lines sung by John Denver capture the wistful longing of migrants to get to their homes in the countryside.

For men the way out is migration. Can migration also be the game changer for women? Can women's abysmally low work participation rates increase by enhanced migration? If so, under what conditions? If India really wants to increase women's work participation, we need to think more about migration. This is the question that this paper is focussed on.

This study draws on extensive field research by the author in some of the poorer out-migrating states. In particular it draws on a survey conducted in the aftermath of the covid pandemic that was led by the author and conducted by the Association for Advocacy and Legal Initiatives (AALI), a civil society organisation that is working for women's rights in the states of UP, Jharkhand and Uttaranchal. The sample drawn from poor bastis in 30 villages, includes migrants and non-migrants. In both groups, the respondents include those who are employed and those who are not employed.

The first part of the paper examines some of the factors that have worsened the employment opportunities in rural areas. These are the push factors that compel the poor to migrate.

The second part provides a profile of the non-migrant women. These include those who are wholly engaged in domestic duties as well as those who are in paid employment.

The third section analyses the situation of migrant men and women. How many women migrate and of these how many find employment in the destination areas? What are their occupations, wages, working hours and working and living conditions? What was the situation during the lockdown? Did reverse migrants find employment in the villages they went back to? Do they see a future for themselves in the village? It looks at the trauma of their journey home and notwithstanding this, their decision to go back to their destinations. This paper explores these and other questions related to migration and employment from a gender lens.

The final section concludes with a discussion on the key issues. It draws attention to some of the odds that are stacked against women who migrate for work and the policy and other measures that are required to deal with them so that migration can bridge the link between women and work. It has taken a global pandemic and the inhuman experiences of thousands of migrant men and women workers to stir the conscience of the nation and bring their needs into policy focus. This trauma should never be repeated. Never again.

### **Economic Freedom for the Landless and Migrant Labourers in Agriculture**

**Rajni Kapoor**, Assistant Professor, Shaheed Bhagat Singh College, University of Delhi, Delhi

The purpose of the study is to assess economic freedom for rural landless and migrant labourers. Economic freedom in agriculture deals with the options and opportunities provided in the form of institutional reform, labour wage contracts, market reforms, and development policy. There are prominent financial support programs, technical research and extension facilities, agricultural biodiversity and marketing resolutions provided for enhancing agricultural efficiency. Nevertheless, efficiency depends upon the ability to access economic opportunities and capabilities for efficiently

taking decisions. Access abilities of the landless and migrant labourers are influenced by several socio-economic factors, like; age, health, education, income, and employment. Moreover, the rural landless and migrant workers belong to the most vulnerable section of the society, in agriculture, they are engaged in numerous farm and off-farm works for their livelihoods. Wherein, land inequality and market imperfections are found due to monopsony features of the rural labour market and thus there are limited options and opportunities to enhance efficiency. The movement of labourers from one place to another for employment and better wage options are unpleasant economic choices that compensate for agricultural efficiency, and may adversely affect the socio-cultural environment of the migrant families.

The first objective of the paper is to identify and assess determinants of economic freedom in agriculture assuming positively related to the farm-level efficiency, the second objective is to examine the impact of socio-economic factors on economic freedom thereby analyzing accessibility of economic opportunities and choices for enhancing the efficiency of farms. Literature evidenced that institutional reforms improved labour efficiency through redistributing the ownership rights among the marginal and landless labourers; and development policy provided off-farm job opportunities at higher wage rates to the local and migrant workers of the rural area. Financial support given in the form of input subsidy has reduced the explicit cost of cultivation, as well minimum support price prevented farm revenue against any extreme fall of the market price. Likewise, farm technical efficiency is improved by transmitting the technical knowledge from individual farmers to the entire farming community using information, communication and technology in agriculture. Marketing reforms, market access and trade policy resolved trade and transaction-related issues of the farm produce. Thus, there are unlimited opportunities for rural labourers in agricultural-based developing countries.

## **TECHNICAL SESSION 2.4**

### **Informal Work Arrangement and Access to Health Care Facilities among the Migrant Workers in Urban Arunachal Pradesh**

**Vandana Upadhyay**, Department of Economics, Rajiv Gandhi University Rono Hills, Doimukh,  
Itanagar, Arunachal Pradesh

India witnessed a mass exodus of its internal migrant workers from the urban areas, back to their villages during the Covid-19 lockdown. It was an unprecedented situation which brought into the forefront the extremely vulnerable and a pitiable position of the migrant workers in the country. The pandemic also highlighted the major issues that the migrant workers are confronted with, such as lack of wages, social security and employment security. This paper attempts to locate the Informal work arrangement and the working and living conditions of the migrant workers in the urban areas of Arunachal Pradesh, a mountainous border state strategically located in the eastern Himalayan region of India with porous international borders. The state has witnessed a steady inflow of migrant labours because of low population density, unavailability of skilled labour and various government policies, both from other states of India as well as the neighbouring countries. The institutional peculiarity of the state includes the inner-line permit system that restricts the entry of outside labour to the state and the laws preventing transfer of land to people from outside the state. Lack of industrialization, predominance of government service within the non-farm sector, and an ethnically diverse, labour force with a substantial migrant component have shaped the growth of the state. Based on a primary survey of the construction workers in the capital complex region of Itanagar in Arunachal Pradesh both in the pre-pandemic and post pandemic period, the paper analyses the interrelationship between the informal work arrangement, poor living standard and access to health care facilities among the migrant labourers. It also analyses how the bargaining power of the workers has been reduced substantially in the post-pandemic period because of non-availability of work. It further highlights, how even a relatively modest out-of-pocket health expenditure can cause indebtedness and thus lead to poverty. The consumption pattern of the migrant labour in the labour camp shows that the workers spend a very small proportion of their income on food items. Among the non-food items, they spent a substantial amount of their income on health care during the pandemic. Out-of-pocket health expenditure has an adverse impact on the standard of living of the migrant household. It was observed that there were extreme forms of vulnerability and food insecurity among the migrant workers, who were found to be living in unhygienic make shift houses and labour camps with no social security net, working in the lower rungs of the informal economy.

## **Migration and Development -A Review of the Period 1980-2011**

**Mala Bhattacharjee**, Associate Professor, Raja Peary Mohan College, Kolkata, West Bengal

This paper is an attempt to link migration to the development aspect of the economy. As per the existing literature on the theory of migration, inequality, regional wage differentials and regional development create a natural spur for people to migrate. Globalization and subsequent restructuring of the Indian economy after economic reforms have created conducive environment for more internal migration across sub regions. Focusing on India, this study aims to investigate the effects of uneven regional development on internal in-migration and out migration within the country of India as a response to development strategies undertaken by the government at state level. Using a balanced panel regression method, the paper identifies that all the measurements of in-migration and out-migration behavior varied similarly across the states in the milieu of development policies and in the face of widespread variation in migration behaviors among the various agents of migration at state level. However, development aspects at state level inflicted different types of moves for different sector-wise, gender-wise, and stream-wise migration behaviors. The study confirms that both the development and underdevelopment aspects of regions through structural adjustments initiated after the economic reform in India in the decade of 1990s are strongly associated with internal in-migration and out migration in contemporary India. Since federal state government's expenditures could not create a balanced pathway to development process in India in the post reform era and the expenditures being often unequally distributed within the state, the overall expenditure often failed to offer a check to human movement across regions. Uneven development being the major reason for migration and urbanization being the sole consistent factor to attract migrants, Indian government should cast serious glance on regional policy making across and within Indian states to ensure flocking of migrants evenly across states especially in the urban pockets with adequate provision of basic amenities and health care facilities if such immigration remains a desirable issue of eradicating poverty through assured low grade job.

## **The Effect of Covid-19 Pandemic on Rural Workers: A Panel Data Study from Indian Villages**

**Deepak Johnson**, Associate Fellow, Foundation for Agrarian Studies, Bengaluru, Karnataka

**Tapas Modak**, Associate Fellow, Foundation for Agrarian Studies, Bengaluru, Karnataka

This paper examines patterns of employment from the onset of the Covid-19 pandemic in March 2020 to June 2021 drawing on a unique panel data set of workers from 24 villages spread across 12 States and 19 agro-ecological zones in India. Through this dataset, we study the impact of Covid-19 pandemic on rural workers, including differences in the experience of men and women workers, and workers from different social groups. We captured data for 93 workers across three time periods: first, the period immediately following the announcement of the lockdown (March 22 to May 31, 2020), secondly, the period comprising three months after lockdown restrictions were lifted (June 1 to August

31, 2020), and thirdly, the second year of the pandemic, that is, from December 1, 2020 to June 30, 2021). We find that the recovery of employment after the lockdown (between first and second period) was differentiated between male and female workers. The recovery in employment was due to the beginning of kharif agricultural cycle, even though the extent of agricultural employment varied based on the cropping pattern of the study villages. The third period saw a recovery of non-agricultural economic activities. This accounted for lowering the gap between male and female workers that were employed. This period also saw the overall recovery in non-agricultural work. In terms of earnings from non-agricultural work, while more than half of the households reported zero earnings in the first two periods, less than one-tenth of households had no non-agricultural earnings in the third period. We argue that the dynamics of rural employment recovery has been connected to the recovery of agriculture and non-farm activities in the study villages. We build on this analysis by exploring this data set using quantitative methods (transition matrices for agriculture/non agriculture employment, etc.) and qualitative data on village-level specificities.

### **Mapping the Intersectionality's of Gender, Migration and Precarity under a Neo Liberal Modality of Governance**

**Roli Misra**, Associate Professor, University of Lucknow, Lucknow, Uttar Pradesh

In the past three decades, India has witnessed rampant urban development. Large metropolitan cities such as Mumbai have been the key focus of the Neo liberalisation and Urbanisation debate in India. However, the 'tier 2' cities have been missing from this spectrum of scholarship. The question we are looking forward to answer here is, how does neoliberal statecraft affect and shape the lived experience of the vulnerable in the moderately growing ties of India. To explore this question, we have taken the case of migrant women waste pickers who originate from Barpeta, Assam and have settled in Lucknow, Uttar Pradesh. These individuals are placed at the lowest link in the hierarchy of power and economic structures in the urban spaces. They have been working for years, contributing significantly to the waste management of cities by segregation, cleaning and recycling waste. Under the changing forms of governance, they have been facing a threat to their livelihoods. The paper is based on qualitative data collected through series of field surveys which have been conducted between December 2018 to December 2020 in villages in Barpeta as well as in slums in Lucknow inhabited by these Bengali speaking Muslim migrants from Barpeta in Lower Assam. Data for this study was collected through survey (n=200) including semi-structured interviews (n=100), follow-up visits (n=70), and focus group discussions and case studies (n=30). This paper is an attempt to present a gendered perspective on the trials and tribulation of women waste pickers, their place in the expeditious city space. In addition to the modality of statecraft, we have also explored the various social, political and economic dynamics that further affect them. Based on the finding that emerge out of the qualitative data collected from the field, the paper has been concluded with some policy recommendations that be helpful in improving the lives of these women waste-pickers.

## **TECHNICAL SESSION 2.5**

### **Exploring the Macroeconomic Determinants of Remittances: An Empirical Evidence from the Selected Asian Countries**

**Ujjal Protim Dutta**, Assistant Professor, Rangia College, Rangia, Assam

**Debasis Chakraborty**, Assistant Professor, National Institute of Technology Durgapur, West Bengal

Developing countries have witnessed a manifold rise in the inflows of remittances over the years. These inflows have proven to be the second largest in terms of financial flows in these countries. There have been several studies on the determinants affecting the inflows of remittances. However, to comprehend the economic effects of migration and remittances and to maximize its development impact, it is essential to explore various factors for remitting money. Keeping this in mind and to understand the different factors influencing inflows of remittances so that they can formulate proper and effective policies present study is an endeavour to study the macroeconomic factors which affects remittance inflows in 31 selected Asian countries over the period of 2000-2017. This study adds to the already existing literature on the motivation behind remitting money by addressing a key question namely whether inflows of remittances are drive by altruistic reasons or self-interest reason of the migrant labour. This question is addressed by the study by incorporating the destination country and origin country economic conditions in the model adopted in the study. The selected countries in this study are the major labour exporting countries in the Asian region and these are the same countries which have received relatively larger inflows of remittances.

Several methodologies have been applied to estimate macroeconomic determinants of remittances. Initially the study adopted fixed effect and random effect methods to carry out the preliminary estimation on the panel data. Subsequently, fixed effect and system Generalised Method of Moment (GMM) are used to check the robustness of the results. The variables under consideration for this study are remittances, GDP per capita of host country as well as of the home country, inflation, financial status of the home country, real exchange rate and mobile phone penetration. Except real exchange rate, data of aforementioned variables have been taken from the World Development Indicators (WDI) database of the World Bank, while data for real exchange rate have been obtained from UNCTAD database.

The outcome of both fixed effect and random effect models provides mix results. The study does not find a significant effect of GDP per capita of host country on remittances. The coefficient of GDP per capita of home country is found to be positive and significant in case of fixed effect model, while opposite holds true in case of random effect model. However, the coefficient of financial development is found to be positive in both the models. Likewise, the coefficient of mobile phone penetration is also positive and statistically significant at one percentage level. In contrast to this, level of inflation and exchange rate are not appearing to be significantly correlated with inflows of remittances in both fixed effect and random effect. Hausman test reveals its choice in favour of fixed effect model.

However due to the possible existence of endogeneity, the study has also applied Arellano–Bover (1995) and Blundell–Bond (1998) system GMM panel estimator system. GMM reveals that income of the destination country and the inflows of remittances is positive and robust, meaning that the economic status of the destination country will positively affect the money being remitted by the migrant workers. Depending upon the living standard in the host country, the remittance inflows tend to increase as it is a direct consequence of a rise in the real per capita GDP of the host country. Remittance inflows to the Asian countries act as a cushion for these countries against adverse economic conditions. Notwithstanding the estimation model used, the coefficient of real per capita GDP of the home country is always negative and statistically significant. This implies that if there are unfavourable economic conditions in the home country, a migrant would tend to remit more to insure the family against the adverse situations. Another way of analysing this result is that the migrants generally send back more remittances to the family left behind so that they can maintain a certain standard of living. In this scenario, the remittances sent back by the migrants will be more, if the receivers become financially poorer. The level of inflation in the home country is seen to influence the inflow of remittances positively and significantly. This is a direct reflection of the migrant's intention to enhance financial support to the family when the price level is increasing. In a situation of increasing price level, the lower income households are affected the most. Though the study did not find any significant effect of financial status of the home country on the inflows of remittances, yet we cannot overlook the importance of financial development of the country on inflows of remittances. Underdeveloped financial institutions in the home country are one of the primary reasons for the migrant workers to generally opt for informal channel, leaving out remittances from formal circuit of saving and investment of banking sector. The study successfully checked the validity and robustness of the results.

### **Analysis of Output and Unemployment in China: An Analysis using Okuns Law**

**Ibrahim Nurudeen**, Lecturer, Shehu Shagari College of Education, Sokoto, Nigeria

**Manhar Singh**, Ph.D. Scholar, Punjabi University, Patiala, Punjab

The aim of this paper is to estimate the Okun's law in the case of China for the time period between the year 1991 and 2020 by empirically examining the Chinese expected unemployment rate by the end of 2021 given the targeted GDP of 8.5 percent at the end of 2021 by the World Bank. The stochastic properties test used reveals that all the three variables follow I(1) process, therefore they are integrated of order 1 on trend and intercept assumption. Utilizing this data generating process (DGP), the regression model has proxied the trend when estimating the Okun's law. The estimates show that if the growth rate of 8.5 percent is achieved by the end of 2021 as pronounced by the World Bank that would translate into an unemployment rate decline by only 0.05 percent, on over all, this would bring the level of unemployment rate to 3.9 percent. In the same vein, assuming the 8.5 percent targeted GDP, the youth unemployment is expected to be at 13.9 percent by end of 2021. Thus, even though Okun's law is holding for China, 8.5 percent growth rate is not sufficient enough to significantly bring down the level of unemployment especially for the youth.

## **Mobility of Health Workforce from India – Bilateral Agreements as a Regulating Instrument**

**Banantika Datta**, Doctoral Student, Indian Institute of Management Bangalore, Bengaluru, Karnataka

Global demand for health workers has increased in the last two decades, thus widening the demand-supply gap. According to an OECD report of 2017, many OECD countries like UK, Australia and Germany still have health worker shortages domestically. Foreign-trained doctors working in OECD countries increased by 50% between 2006 and 2016. In 2017, health and social services accounted for 11% of all OECD employment. During COVID-19 pandemic, many OECD countries have recognized migrant health workers as crucial asset to support medical systems in their countries and have introduced policies to facilitate arrival or extend visas of foreign health workers. There will be a projected shortfall of 18 million health workers by 2030, thus health workforce must be treated as a global public good, to achieve the universal health coverage (UHC) goals.

This needs coordination between the destination and source countries, such that the developing countries with poor health indicators are not aggressively targeted for health workers. Therefore, we need a comprehensive measure to identify these countries with critical shortage of health workforce. This paper provides a modified framework to measure critical shortage and finds that major source countries, including India fall in this category. India is way below the WHO prescribed threshold of 45 health workers per 10,000 people. As per National Sample Survey (NSSO) 2017-18 estimates, India has only 27.5 health workers per 10,000 population and even lower after qualification adjustment with just 17.6 health workers per 10,000 people.

Despite being classified as a country with critical shortage of health workers, India is the largest source of foreign doctors in OECD countries and second largest for nurses. OECD data shows that in 2017 there were 69,000 Indian doctors and 56,000 Indian nurses working in the UK, US, Canada, and Australia. According to Kerala Migration Survey of 2016, emigration rate for medical doctors from Kerala is around 19.4%, with Gulf countries being the leading hosts. Indian nurses are increasingly demanded in countries like Saudi Arabia, the UAE, Ireland, Germany, the Netherlands and Belgium. Overseas Development and Employment Promotion Consultants (ODEPC) Ltd, a Kerala government undertaking, reported sending 253 nurses abroad in February this year from an average of 40 a month. Indian nurses are also paid additional salaries and benefits (Kumar S, 2021).

This raises serious concerns whether India even has a sufficiently large pool of health workers to afford such high out migration of doctors and nurses. The skewed distribution of HRH across states and low public expenditure on health makes the goal of achieving UHC even more stressful. In addition, the quality of medical education produced in India raises further questions on the already overburdened medical staffs working to provide the health access to all parts of the country.

The Ministry of Health and Family Welfare has actively undertaken several initiatives to set up new medical colleges through Public-Private Partnership relaxation of norms for enabling establishing medical colleges, in terms of requirement for faculty, staff, bed strength and other infrastructure. India

is working on standardization of guidelines and curricula, increasing number of seats for medical and nursing education, the MBBS seats have increased by 53.22% and M.Sc. Nursing seats have increased by 23.53% from 2014 to 2020.

One way to manage mobility of health workers is through bilateral agreements. Agreements can serve as an effective tool in regulating mobility of health professionals as it increases transparency and reduces uncertainty. International Labour Organization (ILO), OECD and WHO have promoted BLA (Bilateral Labour Agreements) as important mechanisms for workforce planning and managing health workforce migration. 29 of the 63 WHO Member States reported the use of bilateral, multilateral or regional arrangements for international recruitment and migration of health professionals.

India has not actively signed many bilateral agreements with its top recruiters of health workers and hence there is untapped scope for smooth migration flows, expect an MRA (Mutual Recognition Agreement) with Singapore in 2018 which allowed for mobility for Indian nurses from seven recognized Indian Training Institutions and signed another MoC (Memorandum of Cooperation) with Japan in 2021, which allowed for temporary mobility of health workers.

The Ministry of skill development and entrepreneurship (MSDE) is focused on skilling and training healthcare professionals, after identifying 300,000 jobs in healthcare workers, doctors, nurses, and allied health personnel, in countries like Australia, Germany, Canada, Japan, Singapore and Sweden. This research highlights the need for India to sign more MoCs, MoUs and MRAs for efficient and timely recruitment of Indian health workers, ensuring good employment terms in the host countries, technology and knowledge transfer, easing visa procedures, integration in the Indian medical system upon return, standardization and harmonization of curriculum, recognition of Indian qualification in host countries, exchange of medical students or providing scholarships to India students and trainees.

This paper also tries to understand some of the compensatory reserve flows in form of capital investment (FDI) in health sector, and results show that its mostly in manufacturing and construction and not channeled towards educating young health graduates and R&D, which is essential for a sustained production of qualified health workforce.

### **Rethinking Skilled Migration from India: The Case of H4 Visa Holders**

**Tasha Agarwal**, PhD Scholar, Ambedkar University Delhi, Delhi

International Migration of skilled individuals is often seen in light of skilled labour migration. The debate surrounding such skilled labour migration is often focused on the discussion of either brain drain or brain gain. It is either seen as brain drain where thousands of skilled migrants move to another country and contribute to the GDP of the destination country or as brain gain where such skilled migrants are also seen as the source of income through remittances and also as a source of knowledge and information by bringing in latest technology and R&D to the home country. However, the major assumption on which such debate lies is the movement of such skilled individuals for the purpose of work. According to the data on international migration, along with migration of H1B visa holders,

there is a parallel migration of H4 visa holders. Several studies have already established that these H4 visa holders are also the highly educated, experienced and skilled workforce. However they do not constitute a part of labour migration because they are move as dependents of the H1B visa holders, post marriage. They are restricted from entering the labour market, thus do not contribute to the GDP of either the home country or the destination country. Now, this case of H4 visa holders provides an impetus to rethink on our understanding of skilled migration. First, it brings to fore that there is an underestimation of the skilled migration from India. Second, the ignorance of H4 visa holders also excludes them from any policy discussion aiming to improve their experience at the destination country. The forced dependency and the lack of adequate policies towards the issues of H4 visa holders pushes them towards social reproduction and care work leading to issues of domestic violence, loneliness and psychological distress.

### **COVID-19 Lockdown, Family Migration and Unemployment in a Gendered Society – A Theoretical Analysis**

**Sushobhan Mahata**, PhD Scholar, University of Calcutta, Kolkata, West Bengal

**Rohan Kanti Khan**, PhD Scholar, University of Calcutta, Kolkata, West Bengal

**Sarbajit Chaudhuri**, Late Professor, University of Calcutta, Kolkata, West Bengal

**Ranjanendra Narayan Nag**, Associate Professor, St. Xavier's College Kolkata, Kolkata, West Bengal

COVID-19 has posed severe challenges not only to research in the field of medicines and natural sciences but also to policymakers. The COVID-19 pandemic, the subsequent lockdown and physical distancing measures have had a significant impact on the contact-intensive sector while the non-contact-intensive high-skilled service sector circumvented the pandemic inflicted lockdown. Given that the labour market in India continues to be gendered with gender-based wage differentials besides occupational segregation, female labour has to bear the burn of the unprecedented COVID-19 induced economic shock that is relatively higher than its effect on male labour. This paper contributes to an extensive literature on the incidence of COVID-19 in a gendered society that is not at all mechanically biological entity but fundamentally socially nurtured. Against this backdrop, a micro-theoretic dualistic general equilibrium model has been constructed for a distortion ridden developing economy in the presence of capital market imperfection, open unemployment of male and female unskilled labour and unskilled male migration with family and without family. The mobility decisions of the rural unskilled households have been derived as a Nash-bargaining solution between the male and the female member. The COVID-19 lockdown has been conceptualized as a government-controlled exogenous policy instrument to restrict human mobility in the contact-intensive economic activities that have multi-dimensional effects in the form of high transaction cost in the production sector, restriction on physical participation of labour, adverse demand shock and an unprecedented high urban cost of living. The effects are examined on male-female wage disparity, regional migration, unemployment and distribution of female work effort in unpaid household activities and wage-earning activities. Finally,

using this structure we critically analyze and compare the effectiveness of an expansionary credit policy and direct cash transfer to workers in controlling the damage caused by the lockdown. The results of the paper reflect internal contradictions of developing economies that have a conditional conditioning relationship with an archaic structure.

## **Do Remittances Improve Health Care Expenditure in Ethiopia? Evidence from Household Responses**

**Haile Ademe Ayalew**, Ph.D. Scholar, Indian Institute of Technology Roorkee, Roorkee, Uttarakhand

**Pratap C. Mohanty**, Associate Professor, Indian Institute of Technology, Roorkee, Uttarakhand

Health capital is a vital resource to increase labour productivity and the amount of time available for market and non-market activities. This study is conducted to analyze the impact of remittances (foreign and domestic) on health care expenditure in Ethiopia. To this end, we utilized data from the recent Ethiopia Socioeconomic Survey collected in 2015/16 and applied the instrumental variables (IV) technique for coefficient estimation.

While many empirical studies on the theme have been conducted in Latin America and Asia, studies in Africa on the topic are too scanty. Therefore, a study in the African context is quite essential. The study can have three major contributions to the literature. Firstly, the study of both foreign and domestic remittances is a novel approach to this study. All previous studies in Ethiopia and most studies in other developing countries have emphasized the effects of foreign remittances. However, a study of both foreign and domestic remittances, is a good approach to distinguish the relative importance of such non-labour incomes.

Secondly, all previous studies in Ethiopia and most of the studies in other developing countries have utilized non-representative data. This study, however, used representative data at national, regional, rural and urban levels. Thirdly, we applied a novel heteroscedasticity-based instrument with external instruments. Lewbel (2012) introduced the applications of a heteroscedasticity-based instrument and proved that the approach is highly beneficial when either valid external instruments do not exist or to supplement external instruments and improve the efficiency of the IV estimator. To the best of our knowledge, the IV technique employed in this study is novel to the topic.

Two extra minor contributions of the study can be: i) the study attempted to show the impact of remittances on the health capital equity issue, which has never been examined in the large body of previous literature and ii) the study is the first to broadly investigate the health capital accumulation impact of remittances in Ethiopia.

A simple mean comparison test between the health care expenditure of remittance (both foreign and domestic) receiving and non-receiving households indicate that remittance-receiving households have a higher health care expenditure than their non-receiving counterparts. Descriptive results also show that the highest recipient of foreign and domestic remittances in the sample are households in the fifth quintile group and those living in urban areas.

The econometric approach implemented in this study used a novel heteroscedasticity-based instrument technique with some external instruments. Results obtained from the IV approach revealed foreign and domestic remittances improve the healthcare expenditure of remittance-receiving households. While being in a foreign remittance-receiving household led to a 69% higher health care expenditure than the non-receiving household, a domestic remittance-receiving household has 52.5% higher health care expenditure than the non-receiving. In addition, when the remittance measurement is changed into the level or amount of remittance, a 1% increase in the foreign and domestic remittances results in a 6.5% and 5.8% increase in the health care expenditure of receiving households, respectively. Therefore, results are robust to the measurement of the remittance variable. Furthermore, sub-sample estimations using ambulatory and hospitalization expenditure categories revealed that outpatient health care expenditure is significantly and positively affected by both foreign and domestic remittance-receiving status. The effect of remittances on hospitalization expenditure is, however, found insignificant.

On the other hand, a consumption-based quintile regression analysis revealed a bad signal that domestic remittance-receiving status expands health inequity by increasing the health care expenditure of households in the fifth quintile than households in the lower quintile groups. The study concludes that foreign and domestic remittances increase health capital accumulation in Ethiopia. Therefore, policies and strategies that can further enhance remittance transfers, particularly to rural households, would help to boost human capital accumulation through improving the health capital of receiving households.

### **Migration, Remittances and Development: A Study of Indian Migrants in The Gulf**

**Anisur Rahman**, Director, UGC Human Resource Development Centre, Jamia Millia Islamia,  
New Delhi,

**Niharika Tiwari**, Assistant Professor, GB Pant Social Science Institute, Prayagraj, Uttar Pradesh

There are presently more than 272 million migrant workers across the world. They constitute about 3.5 per cent of the World population. Women constitute about 48 per cent of total migrants. India figures amongst the top 10 migrant countries in the World. More than 25 Million Migrants are living in the Gulf Cooperation Council Countries. There are about 8.5 million Indian workers. Remittances sent by migrant workers contribute significantly in foreign exchange earnings and GDP growth of nations. They also enhance economic betterment of migrants' families. They are considered to be the engine of economic growth for many developing countries like India. Remittances sent through informal channels are considerable in many developing countries such as India, Pakistan, Bangladesh, the Philippines and Sudan, etc. The true value of remittances is likely to be much higher as only a portion of total remittance flow through official channels. The United States remained the top remittance-sending country (USD 68.0 billion) followed by the United Arab Emirates (USD 44.4 billion) and Saudi Arabia (USD 36.1 billion). A severe widespread corona viral pandemic has been occurring in

the world since December 2019. The COVID-19 has brought about numerous current challenges, including health, transport, the economy, finance, employment and unemployment, prices, emigration and transfer, the economic situation and so on in different sectors of the society. The main aim of this paper is to examine the emerging trends of migration from India to the Gulf and its effects on migrants' households in India. An attempt has been made to examine the annual trends of Indian labour outflow as well as the volume of Indian migrants present in this region during the last three decades. How has it affected the Indian economy and society as well as the Gulf has been dealt with in this paper briefly? The working and living conditions of migrant workers in the Gulf countries has also been examined. However, the overall effects of the Gulf migration have been the focus of attention in this paper? As the Gulf migration plays an important role in benefiting India as well as the Gulf in many ways. As we know that the Gulf region has been one of the most important destinations for a large number of Indian workers especially semiskilled and unskilled and there are over 6 million Indians working in the Gulf. This population mobility has had positive impact on India's employment, balance of payments, commodity export, business profits and government earnings. The inflow of the Gulf remittances is playing a major role in this direction. This migration has also provided a cheap labour to the Gulf countries as well. So we can say that both India and the Gulf countries are benefitted enormously due to the mobility of labour from India. All these issues have been briefly examined in this paper.

## **TECHNICAL SESSION 2.6**

### **Consumption Shocks Faced by Migrants and Other Vulnerable Groups in Rural India during the COVID-19 Lockdown**

**Simantini Mukhopadhyay**, Assistant Professor, Institute of Development Studies Kolkata,  
Kolkata, West Bengal

The sudden lockdown imposed by the Indian state during the initial stage of COVID-19 in March 2020 has been described as ‘the largest COVID-19 national lockdown in the world’ (The Lancet 2020). It led to huge job losses and massive reverse migration, arguably the largest mass migration since the country’s partition in 1947. Thousands of migrant workers apprehended an extension of the lockdown, imminent job loss and hunger, and flocked to their native villages. Some studies claimed that rural India has been more resilient to the COVID-19 pandemic, with the agricultural sector bearing the promise of sooner recovery.

Reports have also shown that the lockdown brought about immense miseries for people in the villages, who faced increasing burden of debt, hunger and severely limited access to services. All of this happened against the backdrop of India’s hunger paradox: with an astronomically high buffer stock of food grains (104 million tonnes in June 2020), the country continued to slip down the league table in terms of the hunger index. Commentators have discussed the detrimental consequences of the pandemic on the already existing high burden of food insecurity and hunger in India.

Policy responses to the crisis, which varied across the Indian states, were severely constrained by the absence of conclusive evidence. Recognizing this gap, the World Bank, in collaboration with IDinsight and the Development Data Lab, conducted a survey titled ‘COVID-19-Related Shocks in Rural India 2020’. The survey shows that the proportion of households experiencing dire and overtly visible hunger (the ones who had to spend a whole day without eating, for instance) was not overwhelmingly high. However, more than a quarter of the households reported that they had to reduce their meal portions. This is alarming, since many studies have shown that even before the pandemic daily intakes of a vast majority of Indians were inadequate. According to an estimate, about a billion Indians suffered from ‘hidden hunger’ or micronutrient malnutrition. Calorie consumption had been falling over time even among the poor in rural India. This has been explained in terms of different factors, including a food budget squeeze caused by a rise in expenditure on non-food items.

This paper uses the World Bank dataset to find out how the likelihood of facing consumption shocks during the lockdown differed across sections of the population in rural India using a multivariate specification. Using probit regression, this paper examines if migrants and non-migrants had different chances of facing such shocks. It also asks if the likelihood differed between agricultural and non-agricultural households and across categories of economic status and social group affiliation. How far state policies have been able to mitigate the shocks seems to be another intriguing question. We ask if state relief, offered in terms of provisioning of food grains and employment security, were

associated with lower chances of facing consumption shocks during the lockdown because the size of the surveyed states varies substantially, the error variance may not be constant across states. This would make the maximum likelihood estimates inconsistent and the estimate of the covariance matrix incorrect. The heteroscedastic probit model has been suggested to deal with such heterogeneity. We check the robustness of our results using heteroscedastic probit model.

The paper found that households with migrants had a significantly greater exposure to food insecurity and hunger. However, those with migrants who did not return seemed to be the worst affected. This category probably included the most vulnerable households which failed to provide a fall back option to the migrants. As Drèze and Sen (1992) note, “People who possess no means of production excepting their own labour power, which they try to sell for a wage in order to earn an adequate income to buy enough food, are particularly vulnerable to changes in labour market conditions. A decline in wages vis-a-vis food prices, or an increase in unemployment, can spell disaster for this class.” This is exactly what happened in rural India during the lockdown in 2020. There was a strong state effect which subsumed the effect of relief programmes. Access to MGNREGA and PDS did not have a significant association with the chance of facing consumption shocks once state-fixed effects were introduced.

After the first wave reached its peak in September 2020, there was a dramatic decline in the number of cases. This was followed by the more severe second wave of 2021, which led to health system failures in many parts of the country. Lockdowns were imposed in many states and the vulnerable sections, including migrants, were hit even harder. Economists have cautioned that the consequences of the second wave in rural India would be more severe than those of the first wave (Inani 2021). Increasing poverty, high unemployment, stagnant wages, and growing indebtedness calls for urgent public action in rural India. Relief packages need to be revamped in terms of securing the rights to food, work and livelihood of rural Indians.

The data used in this paper has its limitations. Food insecurity could be measured better by including questions on anxiety and uncertainty regarding food, quality of food and also physical consequences of inadequate diet. Lack of detailed information on the major occupation of the household also limited the analysis. Moreover, the paper does not claim to causally link the lock-down to consumption patterns. Given the criticality of the issues, we stress on the need for carefully designed large-scale surveys and timely analysis of the same.

### **‘Far Away From Home’ - A Systematic Literature Review of the Factors and Challenges of Women Migration**

**Sana Tabassum**, Doctoral Scholar, Indian Institute of Management Kozhikode, Kozhikode, Kerala

**Manoranjan Dhal**, Professor, Indian Institute of Management Kozhikode, Kozhikode, Kerala

The Sustainable Development Goals Agenda 2030 has for the very first time recognized Migration as a dynamic force of sustainable development for migrants and societies at large. Migration is a complex and a cross cutting phenomenon that requires a holistic approach to policy making as the

economic, social and cultural landscape of host and source regions impact migration. Migration scholars argue that the world is witnessing a phenomenon called “Globalization of Migration”, defined as “many countries being affected by migration at the same time”. The World Migration Report 2020, estimated 150 million international migrants in the year 2000 and this number has grown by 81.3 percent to 272 million in the last two decades with international migrants accounting for 3.5 percent of the world’s population in 2019. Socio economic features of the migrants have undergone a change with skill and education level of the migrants improving drastically owing to the growing demand for skilled labour in highly specialized and segmented labour markets of middle and high income countries. Migration, the essential part of the social fabric of the world is a necessary and a highly desirable process and is an inevitable phenomenon of the world we see today.

Women migration as independent labour migrants has increased multifold times in the last few decades. A key issue in migration literature that is gaining momentum in today’s times is the ‘Feminization of Migration’, defined as increasing participation of women in long distance migration. “Feminization of Migration” was included as a major trend in the latter part of the 20<sup>th</sup> century owing to the increasing presence of women in labour migration in Europe, Middle East and Japan. These women increasingly migrated from Philippines, Indonesia and Bangladesh.

Migrant women are generally employed in stereotypical female occupation roles such as caregivers, nurses, sanitation workers, domestic workers or low skilled industries such as hotel, catering and entertainment industries. In the manufacturing sector women are concentrated in food processing, textile and garment making, and labour intensive monotonous industrial processes. Evidence suggests that women migrants are engaged in two ends of the skilled employment continuum with women being employed in low skilled and semi-skilled labour occupations of domestic work, care givers, service sectors such as eateries, hotels and employed as skilled labour such as doctors, nurses, teachers and secretaries. Women migrants are truly a formidable force of migratory movements and their efforts cannot be discredited in the global economy.

This paper is first of its kind to conduct a systematic literature review analysis of the several factors and challenges of women migration using the PRISMA methodology.

A summary of the systematic review analysis reveals that women are increasingly travelling far and wide in search of employment opportunities or seeking better lives for themselves and their families. Economic independence, emergence of gendered roles of employment, high levels of education and skill, presence of a liberal society, increasing female labour force participation, primary or secondary breadwinners of the family, victims of discrimination and lack of respect in homeland are some of the important factors contributing to women migration. Women face severe hardships in their migration journey, breaking free from the clutches of patriarchy is the first step in their mobility, followed by exposure to extreme vulnerabilities in their destination areas with little or no support to secure their economic and social well-being. Wage inequality, racism and discrimination at two levels of being a woman and migrant workers, social exclusion, loneliness, mental and physical strain, difficult working conditions and absence of legal status are the challenges women in their migration journey.

Comprising a massive 50% of the total migrant community, women migrants are a force to reckon with and migration policies should be gender specific to voice women's concerns and issues. Gender responsive migration policies will promote safe migration and prevent labour and human rights violation, ensure gender equality and enhance well-being of individuals, families and communities. Migration policies in India should become more inclusive by bridging the gap between the policy makers and the grass roots level beneficiaries as most of the time, the policies formulated fail to address the challenges at ground zero.

### **Employability Status of ITI Pass Outs from Punjab: The Challenge and Determinants**

**Anjali Pathak**, Research Scholar, Punjabi University, Patiala, Punjab

**Jaswinder Singh Brar**, Professor, Punjabi University, Patiala, Punjab

The paper explores the employment status of ITI pass outs from Punjab. It also estimates the determinants of employability and the existing challenges among them. The paper is based on primary data, which is collected through a well-structured questionnaire. Out of 1940 pass out students, a sample of 90 pass out was taken proportionately on the basis of Kothari's formula. Binary logistic regression was run on these pass outs by using Statistical Package for the Social Sciences (SPSS) to know about their employability. It has been concluded that with increasing qualification and experience of a pass out, its chances of getting employment increase; male pass outs were more likely to get employment than their female counterparts; with the increase in age of the pass out, chances of getting employment decreases; respondents with engineering trade background are more likely to get employment than their other counterparts; the maximum numbers of employed respondents were hired on the temporary basis with doing job in private sector. Many challenges are observed based on the study like lack of institute-industry linkage, challenges related to apprenticeship, out-dated curriculum, migration issue, geographical problems, placement linked challenge, demand-supply gap, low salary, etc. In order to overcome these challenges, some policy suggestions like institute-industry linkage, increase in salary of ITI pass outs, improvement in data and information management, etc. are given.

### **Impact of Migration on Agricultural Productivity: A Study from Assam**

**Mausumi Das**, Research Scholar, IIT Guwahati, Guwahati, Assam

**Mrinal Kanti Dutta**, Professor, IIT Guwahati, Guwahati, Assam

For a country like India which suffers from the problem of regional inequality, the incidence of outmigration is linked with the pattern of regional development. In recent years, the farm households in rural India are found to face increased difficulty in surviving with agriculture because of the low productive investment in the agricultural sector. As a result, the farm households start investing the

agricultural surplus in other non-farm activities to support their livelihood. Apart from this, a vast portion of the rural workforce is found to migrate to urban centres in search of livelihood opportunities. Most of these migrants are found to be engaged in urban informal sector activities. This movement of labour from agriculture to other sectors has often resulted in labour shortages in the former sector. This type of labour shortages can negatively affect agricultural productivity and may induce the agricultural households to lease out their agricultural land. New Economics of Labour Migration theory of migration also states that the migration of labour can render negative impact on agricultural productivity. Despite the short run negative effect, the response could reverse in the long run as the remittances acquired. Assam being one of the predominantly agrarian state of India has also found to witness a significant portion of the outmigration of its agricultural labour. The data used in this study comes from household level primary survey which was done in four districts of Assam that includes Goalpara, Bongaigaon, Barpeta and Morigaon. This survey gathered the information of only one crop i. e. paddy, because paddy is dominant crop in terms of share of land area in the study area. From the study it has been found that most of the migrants from farm household are unskilled labourer and they are engaged themselves in informal sectors in the destination. This paper tries to examine the impact of such migration on the agricultural productivity of Assam. To examine this objective, this study closely follows the framework of New Economics of Labour Migration (NELM) theory, using simultaneous equation model. The three stage least square method is used to estimate the set of simultaneous equations. Our paper also studied the complex relationship among migration, remittances and productivity in the study area and jointly studied the determinants of migration, remittances and productivity in Assam. The findings of our study support the New Economics of Labour Migration Theory (NELM). NELM theory asserted that migration from study area basically created labour shortages in the household. Therefore, farm households use hired labourer for continuation of farming activity thereby raising the farming cost which has contributed towards reduction in productivity. Since the migrant households in study area utilize their remittances on farming activities. Thus remittances have played the positive role in increasing productivity by loosening loosen the constraint faced by farm household. Again it has also been found that factors like household size, migration network, education of household head have play the positive role towards migration.

### **Differential Impact of Covid-19 Induced Employment Loss: Results from a Primary Survey of Informal Workers**

**Shirin Akhter**, Associate Professor, Zakir Husain Delhi College, University of Delhi, Delhi

**Ganita Bhupal**, Associate Professor, Rajdhani College, University of Delhi, Delhi

**Simin Akhter Naqvi**, Assistant Professor, Zakir Husain Delhi College, University of Delhi, Delhi

COVID-19 pandemic imposed an unprecedented need for unplanned reverse migration on workers working in the urban unorganised, informal sectors of the economy. The greatest exodus of the century left us thinking about our response to the pandemic and the inclusivity of living spaces that we have created. This study is an outcome of the understanding that though this reverse migration and the

problems it caused are well documented there is a need to go beyond the process of migration itself and understand the process of settling down of workers in the rural economy. How the loss of jobs and income affected the individual and the families, what happened when these workers reached back their native villages, what happened to various inequalities prevalent in the rural economy, including inter-generational inequalities, and what coping mechanisms people used, are equally important questions to ask. This paper is based on a primary survey of 160 respondents who had migrated back to their native village, Nasirabad, in the Rae Bareilly district of Uttar Pradesh, from various urban centres across the country. The quest is to look at various ways in which lives of these reverse migrants have changed and to understand their response to the pandemic.

The contribution of this study lies in the collection of primary data from the migrant workers and analyzing their survival strategies after job loss. We also seek to find out how these survival strategies further add to the troubles and hurt of migrant workers. Data shows that as a part of survival strategies from the job loss that was caused by the pandemic, people were forced to accept lower wages and longer working hours. Most women in the sample failed to find jobs and the children were pulled out of education and sent to work. Looking across categories of gender, religion and caste we find that the weaker category is more severely hit in terms of income loss and the recovery in terms of finding it back is slower.

The study focuses on the following objectives:

1. To find out the changes in nature of employment because of COVID 19 pandemic.
2. To understand the survival strategies and coping mechanisms of the interviewed households in the post lockdown period.
3. To analyze how existing inequalities reacted to the pandemic

The data is tested for any significant wage and income differentials between various categories of workers, both, pre and post COVID-19, using log wage and log income structured least square regressions to analyse the correlation structure of explanation, besides a few pairwise sample t-tests, that have been run to examine consistency and relative change. Contribution of this study lies in presenting and analysing data on the coping strategies of workers who work in the informal jobs.

Overall results suggest that the loss of income is greater for women and in most cases women have not been able to find suitable employment post COVID-19. We also find that minorities are hit harder, and the recovery is slower as compared to other surveyed households. This is despite the fact 100% of poor households in the area have reported having received government aid in at least one form; they have either received food or cash. These families have also been active recipient of LPG cylinders and during the period of survey have been in the process of receiving grants from government for construction of houses. Though this scheme was linked to actual construction of houses and money was released on confirmation of construction such a scheme is expansionary in nature and induced flow of money in the economy. None of the respondents or the surveyor denied help and assistance from the union government and the state government. Also we collate with other studies that we have quoted and cited in saying that there was in time help from various agencies, especially the government

but this assistance was not sufficient to lift people out of penury. COVID-19 pushed people into poverty for reasons more than one.

All in all, we see that the pandemic and our response to it has disproportionately harmed vulnerable groups. We must understand how to make more inclusive societies, pandemic has shown how a handful make huge profits at the cost of a larger group. We need to work on ways to charge higher taxes from profit earners. Moreover, this scenario has been an unambiguous call for higher public investments in health and education and Job creation. The problems created by this pandemic are severe and sticky, they will only get worse with time. It is not wise to just wish them away, we, as an economy, need inclusive policies if we do not want years of progress and development wasted. The margins and the vulnerable sections of the society need to be taken care of. This article is a call for a two pronged affirmative action that ensures an increase in public expenditure on health and education so as to benefit more and more people, to provide social security to the needy and to actively engage in job creation.

### **Impact of Covid-19 on Migrant Agricultural Workers: A Study of Livelihoods, Employment and Labour Relations in a West Bengal Village**

**Ranjini Basu**, Senior Agricultural Policy Researcher, Focus on Global South, New Delhi

**Tapas Singh Modak**, Associate Fellow, Foundation for Agrarian Studies, Bangalore, Karnataka

This paper aims to document effects of the Covid -19 pandemic on the lives and livelihoods of migrant agricultural workers, who form one of the most deprived sections within the entire gamut of India's splurging populations of short-term circular migrants. The present study is the case study of migrant agricultural workers during Covid-19 in Panahar village of West Bengal. It is based on two rounds of telephone surveys conducted by the Foundation for Agrarian Studies, between April 2020 and August 2021.

It was found out that there was still a prevalent use of migrant agricultural workers, especially among the large landowners in Panahar. These migrant workers come from the backward and remote areas of Bankura (western part of the State), and stay in the accommodation provided by the employer. They come in groups and perform sowing operations during the kharif and boro rice season for which they are paid in piece rated wages, while they get paid in daily wages during the potato harvest season. They usually make two trips to the village.

They were paid at Rs 3000 per acre for the paddy-sowing operation during the kharif season, while the village rate is around Rs 4250 per acre. Such wage difference is also present in the daily wage rates, which was Rs 250 for the long-distance migrant workers, while the village rates were between Rs 300-350. This finding from Panahar complements the findings of the study conducted among migrant wage workers and their employers in West Bengal in the first decade of 2000s. Ben Rogaly and others showed that the employment of migrant workers by the larger landowners, at relatively lower wages than the prevailing village rates resulted in forms of surplus accumulation, especially in an environment of overall rise in cost of rice-cultivation (Rogaly et.al 2010).

The long-distance migrant workers, majority of whom belong to the Scheduled Caste, could not reach Panahar in 2020 due to the COVID lockdown, and consequently suffered heavy income losses. In the interviews, they informed that the casual-labour employment opportunities were minimal at their place, even during the peak agricultural season.

Another set of migrant agricultural workers, who travelled daily from the neighbouring Blocks across the river Damodar, continued to reach and work in the village all through last year. These groups of short distance migrant workers also receive piece rated wages; however, the wage difference is marginal as compared to the village rates. Interviews conducted during the second Pandemic Studies Unit survey in 2021, suggest that the numbers of this set of short-distance migrant workers have been the increased during the kharif season (2021), leading to availability of surplus labour and shortening of the rice sowing period in Panahar. This was mainly due to non-availability of non-agricultural employment and many migrant workers returned during the lockdown. An agricultural labour from Panahar village stated that they usually receive employment for three weeks during the transplanting of kharif paddy, but it had come down only for 10-15 days in this year because of surplus of labour from nearby villages.

### **Out-Migration from Tripura: An Exploration**

**Pradip Chouhan**, Assistant Professor, Sister Nivedita University, Kolkata, West Bengal

**Indraneel Bhowmik**, Professor, Tripura University, Agartala, Tripura

**Dilip Kr. Rana**, Assistant Professor, Tripura University, Agartala, Tripura

The aspect of out-migration in India varies enormously across the different regions and has several dimensions. In the North-Eastern region, out-migration has been rising in recent years owing to limited economic opportunities, widespread social and political stress, and the changing aspirations of the people, particularly youth. Census data provides a substantial glimpse over the causes of migration, but there is not much to learn about the consequences. In this context, the present paper examines the causes, linkages, and factors behind the incidence of out-migration from Tripura using primary data in the backdrop of the new economics of labour migration (NELM).

The paper observes that incidence of outmigration among the sample households in Tripura has been around 32%, which is lesser than the 35.47% incidence of census 2011. Migration is a feature found among all communities, including the scheduled tribes, scheduled castes, and unreserved in the state. The migrants are mostly young, and their average age is less than 30 years. Two-thirds of the migrants are male, 22% are graduates, while more than 12% are post-graduates. There is a negligible share of illiterates among migrants; work and employment are the primary cause of moving out. Education and higher studies are also important factors of moving out. The migrants are found to be working in the defence and paramilitary forces, working as skilled workers, and even a few are government servants. Some of the urban migrants are professionals.

The migrants are regularly in touch with their family, and phones are the most common medium, and there are instances of video calls also, and the interactions are held almost daily. Remittances

from working migrants are common and such incidences are more in rural areas. Generally, bank transactions are the norm for transfers though a few also use specialised money transfer agencies. The remitted money is used for meeting transaction demands as well as precautionary demands. Further remittances help in the education of the young family members and, last but not least, are used for building assets and loan repayment.

The Probit model suggests that the probability of migration from a household increases with the level of income and level of education of the head of the household. In other words, migration is likely to occur more if the household income is more and the head of the household is better educated. Such a scenario can be contextualised in the light of NELM, where migration is considered to be a family decision. The higher income levels at the origin ensure an environment of support to the migrant in the early days of struggle to find a steady work/ employment. The support of the family during the study or skill-building period may be considered as an investment against future returns in the form of a better quality of life in the after years. The higher levels of education of the household head may be considered as higher knowledge and better empowerment in decision-making regarding issues including migration. Higher learning of the household head also stimulates the importance of skills and facilitates migration for education and higher studies. The positive impetus from the religious characteristics can be understood in the background that a large number of ST youths, practising Buddhism, from Nabincherra are migrants for studies to other parts; while several of the Muslim migrants from Samrurpar village and Sonamura town have moved out in a manner which literature terms as network theory whereby the original migrants attempt to help his/ her relatives, friends and juniors from the place of origin. It may be noted here that the stream of migration among the sample households are generally urban to urban and rural to urban. A movement to rural areas is negligible; as a result, the negative yet significant coefficient for urban areas indicates the greater urge among rural households to use migration as a step to improve their quality of life.

Nonetheless, to conclude, it may be said that out-migration in Tripura is more an economic consideration. The decision for migration is mostly oriented toward a better quality of life, which can be ascertained by education and better employment and earnings. In most cases, the decision for migration is not an individual decision; instead, the family decides jointly for a better future.

## **TECHNICAL SESSION 2.7**

### **Internal Migration Governance Framework in India: Through the Lens of Reintegration Policies in post COVID-19**

**Chandra Kanta Saha**, Assistant Professor in Economics, Sister Nibedita Government General Degree College for Girls, Kolkata, West Bengal

**Soumyananda Dinda**, Professor, University of Burdwan, West Bengal

This study focuses on internal migration governance framework in India highlighting the COVID pandemic. COVID-19 related disruptions have had far reaching impacts on labour, particularly, internal labour mobility in India. The crisis and lockdown have exposed multidimensional vulnerabilities of internal migrants. India needs to build up the governance framework for internal migrants and adopt migration governance strategy incorporating social safety net and safe, orderly and dignified migration during mobility of the crises. It is true that Migration Governance Framework (MiGOF) is rooted in the discourse of international labour migration but it is the need of the hour to apply it in the context of internal migration in India. It was indeed high time that some fine-tune of international standards of migration governance should be made to analyse indicators relevant for subnational or state level analysis. More to the point, however, is the fact that International Organization for Migration (IOM) considers Assisted Voluntary Return and Reintegration (AVRR) programmes which is an indispensable part of a comprehensive approach to migration management, however, it has neglected the issues of reintegration and reinsertion of migrants in the context of involuntary return (or, forced return). Aiming to address this gap, the paper intends to develop a policy framework for reintegration in case of forced return to the origin and destination states. It also points out the potential of reintegration policies to transform the crisis into an opportunity.

Pandemic has exposed non-preparedness of the government to tackle vulnerabilities of internal migrants despite the presence of labour laws and social protection schemes in India. An attempt has been made to reconceptualise different dimensions of international migration governance in the context of internal migration in India. The main objective of the study is to analyse migration governance framework and migration governance indicators in the domains of migrant rights, mobility of crisis and safe, orderly and regular migration related with internal migration. It also tries to evaluate the role of return and reintegration policies at subnational levels.

The study explores the need of a comprehensive migration governance in India to manage internal migration and to build up a roadmap for inclusive migrant policies. Out of six dimensions of MiGOF, four dimensions are noteworthy for the governance of internal migration. These are (i) migrants' rights, (ii) well-being of migrants, (iii) mobility dimensions of crisis, and (iv) safe, orderly and regular migration. In this regard whole-of-government and whole-of-society approach will act as a cross-cutting issue. An exhaustive list of different dimensions of MiGOF to solve the problems of internal migrants in India

has also been provided in this paper. The perspective for policy framing should embrace both rights-based approach of governance and an integrated approach of reintegration for returned migrants. The challenging task was to receive and accommodate large number of migrants, who have been forced to return to the community, while their resilience has been eroded by the lockdown. Different phases of life cycle of a migrant with various types of return has also been highlighted to differentiate return due to crisis from other types of return. This demands to relook national migration policies in the light of Migration Governance Framework focusing on rehabilitation, resilience building and reintegration with the source/origin. A comprehensive approach is required to include and reintegrate returnees with their communities who are also affected by the crisis. Migration Governance Indicators (MGI) will help to monitor and evaluate the comprehensiveness of integration/reintegration policies and/or preparedness of the country. It will help to identify the potential areas where capacities could be strengthened for reintegration of forced returnees to their origin. New governance challenges and prospective policies for reintegration have also been highlighted in this context.

The government should reintegrate return migrants into national and regional level by updating the data on internal migrants, better contingency planning, up-skilling of workers in the light of changes in demand and coordinating policies of reintegration between states of origin and destination. There is a need to build up an information system for reintegrating migrants at sub-national and national levels. This perspective of policy framework shows that reintegration requires longer term support and considerably more resources than any other type of return, and states of either origin or destination are unable (or unwilling) to provide this assistance. Responsibilities of sustainable reintegration should be shared and balanced between receiving and sending states. In this context, fiscal coordination between the states is an important factor to carry out return and reintegration activities. To ensure dignified return of migrants, preparedness of effective return and reintegration should start from pre-migration phase and covers the entire migration cycle. The best return migration policies should create an environment where returning migrants can be properly utilized. The nation can transform the crisis into an opportunity through building resilience and sustainable reintegration strategy, which will provide incentives to returnees for future mobility and (re)migration drive. It is true that reintegration of forced returnees is much more likely to fail but disruption of reintegration programmes has had some positive contribution in the economy. It facilitates transfer of skills acquired at destination for the benefit of the source, stimulates investment in new enterprises and creates a tendency for returning workers to be self-employed. Disruption of reintegration programme has led to increase in online services, development of digital support measures and focus on income generating activities which will help in asset building in the origin state.

The research is unable to provide certain evidence-based reintegration policy on return migrants in India. The study has failed to analyse the impact of the new labour Code on Social Security, legislated by the Indian Parliament, as they are yet to be implemented.

## **Livelihood Strategies of the Slum Dwellers: The Gender Dimension**

**Sanghita Bhattacharjee**, Associate Professor, Women's College, Calcutta, Kolkata, West Bengal

Labour force participation of poor women is often a coping mechanism in response to shocks. Household shocks become adverse due to various reasons. However, in rural areas agriculture distress is very common. This causes relocation of existing poverty from rural to urban areas with the shift of male members from agriculture to non-farm occupation. This relocation again has certain contradictory impact. On the one hand, it causes poor people to congregate in the unsatisfactory living condition in the slums, squatters and pavements of the city, creating a rise in the slum population. On the other hand, the uncertainty of husbands getting absorbed in the informal sector changes the role of the accompanying wife. Economic factors play a strong decisive role in influencing the wife to participate in the labour force, the paid domestic work in particular. Based on our field observations, it was found that poor living conditions, the number of unemployed days per household, as well as unstable income, typically contribute to a dependence on female wage for basic survival. The aforementioned assertion is supported by a linear regression analysis conducted on women's workforce participation. Keeping in mind these characteristics, our policy prescription would be to expand employment opportunities for all in the place of origin. This would improve prospects for female workers while also limiting population spill over into urban informal sectors and the already overcrowded slums, thereby regulating the urbanisation of poverty.

## **MSMEs and Employment Opportunities in India**

**Rajani Adikarla**, Researcher, Centre for Economic and Social Studies, Hyderabad, Telangana

The Micro, Small and Medium Enterprises (MSMEs) sector has emerged as the crucial sector of the Indian economy. This sector has made significant contribution in employment generation, total exports and economic growth. It has contributed to the industrialisation of rural and backward areas. It has also reduced regional imbalances in industrialisation of the country. Thus, it has ensured equitable distribution of national income and wealth.

In this backdrop, the paper makes an attempt to identify the role of MSME sector in generating employment in India. The paper is based on secondary data. The secondary data are collected from the website of the Ministry of Small and Medium Enterprises, the government of India.

In recent years, the MSMEs sector has shown higher growth rate than industrial sector. MSME Sector is second largest employment provider after agriculture. This sector not only offers huge employment but also contributes in regional balance by generating industrialisation to remote rural and backward areas (Tripathi, 2021). As per national sample survey 73rd Round (2015-16) MSME sector has generated around 11.10 crore jobs in the rural and urban areas across the country out of which 3.6 crore have been in manufacturing sector, 3.9 crore in trade and 3.7 crore in other services. The new initiative of the government of India "Make in India" (Zero Defect & Zero Effect) was an important step to balance sustainable economic growth. MSMEs sector has the potential to create jobs opportunities to a huge

number of peoples but adopting the sustainable business policies it goes along and contributes to the Indian economy. The Micro, Small and Medium Enterprises (MSME) are playing a pivotal role by generating large job opportunities at comparably lesser capital cost than large-scale industries and by enhancing industrialization in rural & remote areas including minimising regional disparities and reducing gap between the rich and the poor people of the Indian economy.

The share of MSME is the highest in 2018- 2019 at 33.5 per cent and 30.27 in GVA and GDP respectively .The growth of MSME sector is higher than industrial sector in 2006-2007, 2007-2008, 2013-2014, 2014-2015 and 2015-2016. The share of MSME sector exports constitute significant portion of 50% in total exports of India in 2017-18.

In spite of being MSME sector as an integral part of the sustainable development of the country, it continuous to face several challenges for the survival and growth include infrastructure bottlenecks, inertia to technology adoption, high costs of credit, unable to identify their key competitive strengths to maintain product standards and quality, changing technologies, scarcity of skilled workers, availability of sources of finance and risk capital and delayed payments. Due to pandemic approximately 95% firms of MSME were impacted negatively due to national lockdown imposed in April 2020, 70% of businesses remained disrupted till August 2020(Tripathi2021).

### **Type of Migration and Impact on Women Agricultural Workers: Evidence from Rural India**

**Itishree Pattnaik**, Assistant Professor, Gujarat Institute of Development Research, Ahmedabad, Gujarat

This article contributes to the growing literature on feminisation of agriculture and its impacts on women's empowerment the measurement of which has been at the forefront of policy discussions in recent years. It analyses the complex impacts of gender-selective outmigration on women's roles in agriculture and livestock rearing, and reproductive activities such as household management and financial management. The paper is based on primary data collected from 800 rural households during 2016–17 in the two Indian states of Gujarat and West Bengal.

The analysis shows that migration is higher in Gujarat compared to West Bengal, which makes sense owing to the long history of mobility in Gujarat. The rate of migration varies across districts; migration was highest in Panchmahal (tribal, rain-fed zone) and lowest in Rajkot (ground water irrigated cotton belt). Clearly, more men migrate when they are tribal, if there are no irrigation, and the primary crop is a food crop. In West Bengal, the highest migration rates are in Cooch Behar (also a tribal, rain-fed area) and lowest in Midnapore (irrigated zone). Migration was highest among the marginal landholders and tribals in both states. The two states reveal diverse trends with respect to migration among caste groups; the general population and the STs migrate at higher rates in Gujarat whereas the SCs and STs migrate at higher rates in West Bengal.

A common feature is the high rate of migration among the younger generations. This shows the aging of the Indian agricultural landscape: the average age of farmers in the sample households

was above 50 years. The burden of aging is more prominent in Gujarat, especially in the cash-crop producing zones of Patan and Rajkot. It is possible that income flows from cash-crop production have changed the aspirations of the younger members of rural households, encouraging migration from rural areas.

While short-duration migration is dominant in both states in Gujarat, it was seasonal in nature and in West Bengal, the pattern was irregular (short trips during any time of the year). Males dominate short-duration migration in both states, but the rate is higher in West Bengal.

After male migration, the work burden notably shifts onto left behind household members, especially women. The analysis clearly shows that male outmigration leads to an increase in women's workload related to farming and animal care in both states. Increase in work burden on women was higher in West Bengal compared to Gujarat, displaying higher pressure of male outmigration on women in this state. This is due to the nature of short-duration migration, which is irregular and even takes place during the main cropping season. Higher rate of male migration and migration even during the main cropping season have impacted women's lives and increased workload significantly in West Bengal compared to Gujarat. Therefore, the key to the nature of impacts on left behind, and is an area that needs to be more clearly understood through future surveys. In Gujarat, male migration increases after the harvest period. Higher incidence of long-duration migration of the young people, particularly in Patan and Rajkot, and migration of the male partner after the main cropping season, are some of the factors behind the lower rates of work burden increase in Gujarat. The changing nature of migration from seasonal to irregular in West Bengal indicates a deepening crisis and increased work burden on women.

A notable result is that the increase in workload on left-behind family members is diverted mainly on the elder daughters. In Gujarat, it was found various instances where while the mother performs the tasks at the farm and takes care of animals, the eldest daughter replaces her at home and carries out all almost all household chores, such as caring for younger siblings, cooking, cleaning and so on. As a result, girls dropped out of schools to perform household duties (predominantly in Panchmahal and Patan. Migration adversely affect the education and labour supply responses of members left behind due to the splitting of the family. While young girls dropped out, the boys continued with school. However, very few such incidents were reported in West Bengal. Thus, the effect of migration on education, especially on the girl child, needs to be studied more deeply.

The share of remittance income to the total household income is higher in Gujarat compared to West Bengal. With irregular remittance in West Bengal, women have reported a sense insecurity concerning food because of the lack of cash in the absence of male members. Women in West Midnapore and Purulia also reported that constant borrowing from neighbours further creates a sense of humiliation within society.

We studied two aspects of impacts of male outmigration – women's workload and autonomy. Although there was an increase in workload related to cropping after male-migration in West Bengal, women's participation in decision-making related to cropping was limited. On the other hand, fewer women in Gujarat reported an increase in workload, related to cropping and animal care after male

migration, but women's involvement in decision-making related to farming is higher among the migrant households compared to non-migrant households (women's participation in terms of joint decisions). This shows male outmigration can lead to autonomy with regard to cropping, when women in migrant households can decide on what crop to grow, buy farm inputs, the amount of harvest to be sold and so on. However, it is important to note that irrespective of migration, the involvement of women in decision-making related to major household decisions (such as land and asset creation) remains lower even after male-outmigration in Gujarat.

In West Bengal, the shorter-duration trips outside of the farm add more work burden on women. However, the length of absence being smaller leads to no or little change in autonomy in decision-making related to farming. There is little change in women's autonomy after male migration, though migration increases the workload. The type of migration in West Bengal seems to be more distress-driven desperate moves in their nature and shows that migration takes place in the larger context of changing agrarian relation rather than demographic characteristics of the individual and the household. The two contexts substantiate the argument that the impacts of migration on women vary according to the nature and type of migration, which in turn depend upon the health of the specific agrarian context.

The survey indicated to an uncertain future for Indian agriculture as a result of short-duration male outmigration: largely dominated by male and a relatively aging population. These are important questions to be dealt with for the overall improvement of the sector. For women who are staying behind, male out-migration increases work burdens, but does not improve autonomy, help in knowledge creation, or improve their access to services. The positive impacts of migration, discussed in some literature, need to be studied more deeply. From this survey, it remained unclear if migration increases cash-flow in the origin area, or whether remittance has helped in reducing the inequality at both inter- and intra-household levels, or has impacted investments in agricultural improvements.

### **Evolution of Intermediary Led Seasonal Labour Migration to Brick Kiln – A Study from Balangir District**

**Saida Banoo**, Lecturer, Dutika Sahu College, Sambalpur University, Laida, Sambalpur, Odisha

Seasonal migration is an everlasting and unchanging phenomenon from the KBK region of Odisha. Every year in the agriculturally lean period, lakhs of people from this region migrate to urban areas of Andhra Pradesh, Tamil Nadu, Karnataka etc., to work in the Brick Kilns. Lack of livelihood opportunities in the area forces many poor households to take migration as their occupation for their survival. 'Sardars' (labour agents/ intermediaries) are essential agents who help the labourers to migrate to far off places. Sardars provide an advance payment to the labour and bind them with a contract to work for several months to work in the kilns. This paper tries to give the evolution of intermediary led migration and debt-bondage led migration from the Balangir district. For this, the Sardars, Assistants of Sardars, Labourers and some railway employees were thoroughly interviewed. The Sardars, with time, have made some informal arrangements relating to the area and the railway stations through which

they would send the labourers. The Contractor and the employers exploit the labourers and have made their situation very precarious. The government of Odisha has brought legislation for protecting the labour from exploitation and improving the conditions of labourers. It is observed that different Laws and Acts have largely failed to improve the labourers' working conditions. The problems of migrants will continue to persist unless they are empowered through education, information and enforcement of labour rights institutions. The need of the hour is labour facilitating organisations that can include the agencies which educate the labourer and make him aware of his rights.

### **Effect of Remittance of Inter-Generational Mobility of Education**

**Indra Kant Bharti**, Policy Analyst, Centre for Budget and Governance Accountability (CBGA),  
New Delhi

**Tulika Tripathi**, Assistant Professor, Central University of Gujarat, Gujarat

The remittances play a significant role in educational attainment of the children of migrant fathers those left behind at the place of origin. Broadly, utilization pattern of remittance directs the overall development of educational mobility. In this perspective, Rapoport and Docquier (2005) argue that if remittance receiver households are mainly concentrated on consumption, then economic development of source economy is not directly affected. On the contrary if remittance drives the physical and human capital formation then it accelerates the economic development of the source economy. This will enable more concentrated development efforts in a country of high population mobility such as India since it will help to understand this intergenerational mobility (IGM) of education as an integral part of people's lives.

World-wide most of researchers have argued that absence of the parents (remitter) has been negatively associated with the child's attainment of education (Adams et al., 2008; Robles and Oropesa, 2011) as concern with their attendance and performance in school (Zhao et al., 2014). This negative phenomenon is linked to the various factor affecting the nurture of a left-behind child: psychological impact, improper or insufficient care provided by the local guardian, poor health of the child, questionable quality of education, increasing involvement of the child in domestic duty or workload (Giannelli and Mangiavacchi, 2010; McKenzie and Rapoport, 2006).

On the contrary, there are lot of positive evidence of remittance on education that reflected in the increase in school attendance and reduction in child labour (Stark and Bloom, 1985; Taylor, 1999; Mansuri, 2007; Acosta 2006; Kapur, 2004). Similarly, remittance reduces the gender gap as increase in school enrolment particularly increased among girls in the rural areas (Calero et al., 2009; Antman 2011). Also, it is noteworthy that the remittance-receiving households (RRH) that are headed by females are more likely to enrol their child in school than the male headed ones (Gyimah-Brempong and Asiedu, 2015). Therefore, remittance actually has led a positive impact on educational mobility by removing financial constraints of households and ensuring retention of the child in school (Edwards and Ureta, 2003). Therefore, empirical evidence from worldwide have shown that remittances have had mixed results on human capital investment, that has led to diverse effects on educational outcomes.

In order to migration development nexus, the role of remittance is a fundamental factor that leads to educational mobility in origin's society. So, this study traces the effect of remittances on intergenerational mobility (IGM) of education across the social groups. Further, this study examines whether IGM of education is independent of fathers educational background or remittance are sufficient to cope with structural changes of educational institutions. This paper based on India Human Development Survey (IHDS, 2004-05 and 2011) and used the more rigorous analysis of IGM analysis techniques as Quasi Altham statistics (Altham and Ferrie, 2007), time independence (Hart, 1981), per capita directional mobility, share mobility (Field, 2008), structural and exchange mobility. This paper finds that remittance initiates the IGM of education across all social groups. Second, advantage social group capitalise remittance for educational mobility is far better than other disadvantage social group as shown by Altham statistics and net directional IGM. However, remittance also reduces the social hierarchy as shown by relative measures of IGM (share) and structural upward mobility of education particularly in other backward classes (OBC).

### **Tribal Migration from Rajasthan into Sharecropping System in North Gujarat**

**Tanya Chaudhary**, Associate Fellow, Institute for Human Development, New Delhi

This paper discusses the arrangement of sharecropping between the tribal agricultural migrants from Rajasthan, known as 'Bhagiya Workers' and the farmers in Gujarat. It explains the livelihood and employment options available for tribal communities in the villages which shapes a distinct form of sharecropping system in Gujarat. Through this, it elucidates the existing labouring practices which depends on the uneven geographies of development. The paper lays out the socio-economic complexities of the nature of contract between the Bhagiya worker and the landowner. This contract is different from the standardised sharecropping contract which has emerged in rural areas over a period of time. Drawing from this, the paper navigates the vicissitudes of the sharecropping system which on one hand, provides employment to tribal community, while on another, is also characterised with forms of indentured labour, unpaid female labour and child labour.

### **Gender and Migration**

**Kanchan Devi**, Research scholar, Rajiv Gandhi University, Itanagar, Arunachal Pradesh

Migration is an important platform that helps in bridging the equality in terms of gender. Women are important component of migration as it shares half proportions of the international migrants. Gender is deeply determined factor regarding the decisions on who moves, how those move and resultant futures of migrant women and families. Gender also interacts with social health determinants. So, migration and health interacts making it gender specific concept. Gender specific stressors, resources and vulnerabilities should be the target of public health services in destination countries to promote a better and healthier life of all migrants including women. Educational attainment of both man and

women also influence on migration positively. Indian migration policy is such that it neither encourages nor restricts migration. Since India is highly populated country and the problem of unemployment is the greatest challenge for India. So, the government of India should not restrict the female skilled worker to migrate where the job opportunity for them is high. It will help in lessen the burden of unemployment in India. In fact India with its surplus labour should apply a strategy to facilitate those, who chose to migrate by providing necessary skill and training by which India's position in labour market will go up and thus India can be a preferred source of country for skilled and trained worker. But it is surprisingly true that migration helps all the migrant women to become independent and decision maker, to boost self-esteem of women and provides an opportunity to reduce the gender gap providing many human rights. But there are some restrictive social norms that exist in our society, which limits the gain from migration. The constraints can be social norms or laws, gender and racial discrimination and vulnerabilities that are with especially female migrant. So, policy recommendation should be emphasized on the protection of human rights of migrant women, the migrant women should be provided with some necessary services like health, legal and financial services etc. For international migration, the ratification of international treaties and compensation, which promotes rights and protection for migrant women, is strongly recommended. Government may also make some policies to promote women's access to labour market. In many countries the government rather addressing the causes of gender discrimination or risk faces by female migrant, they banned female migration as a way to protect women and child. They use such policies as a measure to contravene women's right. It is not protective and more dominating fact. So, Specific mechanism of facilitation for women migrant should be set up for their safety, empower and the dignified work rather than adoption of restrictive technique against female migrants.

## **TECHNICAL SESSION 2.8**

### **Economic Implications of Migration at Macro Level – A Study of 3 States in India with Highest in-Migration Rates**

**Uday Salunkhe**, Group Director, Welingkar Institute of Management Development & Research, Mumbai

**Vaishali Patil**, Senior Associate, Dean Research, Welingkar Institute of Management Development & Research, Mumbai

**Ruchi Singh**, Assistant Professor Research, Welingkar Institute of Management Development & Research, Mumbai

**Garima Sharma**, Associate Dean, IIC and Research, Welingkar Institute of Management Development & Research, Mumbai

History of mankind and concomitant evolution of civilization is replete with examples of Human migration for the purpose of earning a living and settling down. Most common migration pattern which emerged in India since the dawn of industrialization is rural to urban. With the economy showing signs of strong growth and an increase in activity, notably in the infrastructure and building industries, immigration is projected to accelerate in the coming years. The study is of a primary nature on inter-state migration to three states; Maharashtra, Delhi and West Bengal with regard to casual laborers seeking work at selected centres on a day-to-day basis. Migration promotes the efficient use of human resources as well as increased output from economic activity. Migration being a multi-disciplinary subject –of interest to historians, economists, demographers, anthropologists, geographers, political scientists, and sociologists- warrants multi-pronged research. Economists are interested in studying migration because of its linkages to economic cycles, the supply of skilled and unskilled labour, the development of industrial income, and the occupational and job status of migrants. To better comprehend the ramifications of rural-to-urban migration, a detailed desk research was conducted using the available research materials. Secondary data was gathered from national and international periodicals' research papers NITI Aayog reports, NSSO reports, Government reports, credible websites, magazines, newspapers, media reports, and the internet. This study however focusses on the impact of rural-urban migration on various economic dimensions at macro-level by studying major states with highest in-migration rates. More than 2000 migrant workers were approached for the study and around 400 workers participated in the survey. From secondary data, we observed that migration has increased significantly all across India. Certainly, Migration from the countryside to the city is not a new phenomenon but has been prevalent for the past few decades, nonetheless processes of globalization have acted as catalysts for change and the rate of migration has grown significantly. Economic impact of migration in poverty reduction, smoothening consumption, improving livelihoods, risk and income diversification etc. is explored in detail on the basis of primary data collection. Key Words: Rural-urban Migration, Economic Implications, poverty reduction, smoothening consumption, risk and income diversification

## **Employment and Labour Productivity of Services Sector in India – A Multinomial Logistic Regression Analysis of the Employment in Services at Disaggregated Level**

**Padma Priya**, Research Scholar, Centre for Economic and Social Studies, Hyderabad, Telangana

The paper attempts to explore the trends of service employment in India from 1990 to 2020 using various rounds of NSSO data at disaggregated level. To assess the diversity in employment within the services sector and to examine the labour productivity, Shapely decomposition method is used by acquiring data from India KLEMS dataset version (2020). The multinomial logit model is estimated empirically by using macro-economic variables taken from PLFS (2018-19) to explain the factors responsible for the choice of sub-sector employment within services in comparison to agriculture and manufacturing sector.

The most common pattern of structural transformation follows a sequence of shift from primary to secondary and then to tertiary. Over the years' service sector has emerged as key growth inducing sector globally. Service sector contributes around 60% of global output. Similarly, there is a growing share of service sector in GDP of India which indicates the importance of the sector to the economy. The service sector accounted for about 28% total GDP in 1950's and its share increased to 54% in 2020-21 (Economic Survey, 2020-21). Importantly, services contribute much higher than manufacturing and agriculture. Though the service sector is the largest and fast growing sector in India and has the highest labour productivity, this trend has not commensurate with employment generation (Mukherjee, 2013). The share of service sector employment was about 14.8% in 1970 and it is 32.3% in 2020-21. The discrepancy between the share of services in output and its share in employment has attracted apprehensions and questions on sustainability (C.T.Vidya, 2019). The paper aims to find the employment potentiality and labour productivity in services sector at disaggregated level. The specific objectives of the study are to study the pattern of employment and employment trends in Service sector and understand how structural transformation affected its growth and employment; to analyze the nature, types and quality of jobs in services sector employment; to examine the labour performance and differences in labour productivity and to explore the factors determining the probability of employment across services sub-sectors.

The study relies on unit level data of quinquennial surveys on employment and unemployment provided by the National Sample Survey Organization (NSSO) and PLFS. It is found out that the employment generation is low in high income generating segments and have low access to marginalized groups, rural residents and for working age women. The higher service employment is found in low income generating sectors. Large number of workers working in service sector are employed in traditional sectors where labour productivity is low and small number of workers are employed in hybrid sector where productivity is high. The findings call for policy resolutions by way of government intervention for employment generation, improving the quality of jobs, training of workforce.

## **Migration and Vulnerability among Informal Labour in Lucknow**

**Rajesh Chandra**, Assistant Professor, Mount Carmel College, Autonomous, Bengaluru, Karnataka

**Meenakshi Kumari**, Ph.D. Scholar, Dr. Ram Manohar Lohiya National Law University, Lucknow

There is a massive development disparity between rural and urban areas that generate rural-urban migration. It is interesting to note that, creating global cities has brought migrant workers from even the remotest and poorest regions of India. The relationship between migration, development, and poverty is complex, which varies with the form of migration, namely, temporary migration or permanent/semi-permanent migration. Long-term migrants are better off than short-term migrants concerning consumption expenditure, employment status, job quality, and educational-levels. This article is an attempt to investigate the reason for inter-district and inter-state migration to Lucknow. The objective of the study is to evaluate various factors influencing short-term migration. This study is based on primary sources of data, collected during November 2020- February 2021. The study examines whether migration of workers to Lucknow is a gainful option to reduce poverty. The study utilizes triangular method, both qualitative and quantitative techniques for the analysis. The population for the study is Lucknow. The city has a mixed migration patterns. Depending upon the diverse pull and push factors, the study utilized a comprehensive pre-tested questionnaire to collect desired information about short-term migrants. The questionnaire consists of individual information, employment mobility, reasons of migration. On the whole, 400 short-term migrants have been interviewed through a structured questionnaire. The probit regressions are employed to examine the impact of various socio-economic factors of skilled and unskilled labour migration (inter-state and inter-district). It has found a positive and significant impact from the benefit of migration, which is shown in the earlier studies. It has been found that lack of education, pressure of big family size, small landholding push rural workers migrated to Lucknow in search of jobs. The findings conclude that a better economic prospect in urban areas will always motivate rural to urban migration. The government should make policies to develop educational attainment and skill to transform the workforce into human capital. The guidelines should prevent the individual from school dropouts and enable those to complete formal education because only education can raise the individual and make the workforce human capital.

## **Climate Variability and Inter-State Migration in India: An Empirical Analysis**

**Richa Choudhary**, PhD Student (Economics), IIT Roorkee, Roorkee, Uttarakhand

**Subir Sen**, Associate Professor (Economics), IIT Roorkee, Uttarakhand

Climate-induced migration is one of the highly debated issue in the current discourse of changing environment and increasing global warming. The economists in particular with other social science researchers are coming up with different methodologies on measurement of the inter-linkages between climate related disasters and possible migration. Different terminologies are used in this context such as climate refugee, human mobility, climate evacuee interchangeably with climate induced migration

to elaborate the issue in social science research. In the last few years, studies attempted to understand the characteristics of migration and its socio-economic impact in the origin and at the destination. However, there are still no concrete outcome as the topic is complex and multidisciplinary. This study focuses on understanding the relationship between climate change induced extreme events and human displacement from the lens of the subject economics. Reference to climate change is important and necessary, as there seems to be a causality between climate change and extreme events. This paper examines the plausible inter-linkage between climate change and migration in context of India at their sub-national level. The relevance of this study lies in the fact that the results may help to design policies related to labour market, public goods procurement, mitigation and adaptation strategies and skills at the place from where migrants originate.

For this, the study uses the approach of gravity model. The empirical modelling is also supported by the celebrated model of migration known as New Economics of Labour Migration (NELM). The NELM explains migration as a household decision and therefore, is affected by the household level socio-economic variables (Stark and Bloom, 1985). The PPML estimation technique is used to obtain the econometric results. The robustness checks allow to prefer a model that has larger set of control variables since it controls for the biasedness and heterogeneity in the model-specification. Interestingly, study reveals that the agriculture-dependent states with low SGDP are prone to the problem of out-migration due to irregular rainfall pattern. Additionally, this may help us to explore different channels by which climate change can act as a trigger to migration for example, the SGDP of the state, share of agriculture related income, distance between a safe and vulnerable place among others. Also, the study suggests that inclusion of variable on disaster matrix could significantly increase the economic significance of the econometric results. It is revealed through the analysis that damages due to disasters cause a direct impact on bilateral migration-trends especially in case of states with lower adaptation capacity. The present study significantly contributes towards the limited literature on the measurement of climate change related migration in developing economies like India.

Finally, the study acknowledges that there may be limitations in the analysis that could be improved with the availability of greater database and more information on tools and techniques for estimating such tenuous linkages. This relationship could be further explored using micro-level studies at village, taluka or at district level in identified states in case of India. Similar studies could be carried out in other developing countries like Bangladesh, Philippines, Thailand among others because these are also the countries that faces highest damages and internal displacement due to climate-induced disasters every year (IDMC GRID 2019).

## **Contract-based Modern Slavery: Technologies of Control in the Kafala Regime**

**Shreya Katyayani**, Research Scholar, Department of Humanistic Studies, IIT (BHU), Varanasi,  
Uttar Pradesh

This paper makes an attempt to study the methods used by GCC nations to control the migrant population on their land with special reference to migrants from the Bhojpuri region of Bihar, its main argument being -the Kafala system as practised in the GCC nations, for organising the guest workers, is more than just an arrangement handling migration but rather is a migration technology in itself wherein the “sponsorship delegates to the citizens the responsibility for controlling and regulating the presence and activities of foreigners on the national territory, which is everywhere else a state prerogative and there is partial privatisation of control”. For this, they have refurbished the age-old Kafala to craft it into a cutting-edge technology of migrant control and surveillance by linking every migrant to his citizen-sponsor, who, on behalf of the state, wields complete control on the mobility, social life and employment of the Makful (migrant). The paper, through the concepts of porous and indeterminate borders, tries to show how borders do not «exclude» but there is «differential inclusion» of the migrants, which is no less violent than exclusionary measures, wherein borders exist between the male migrant and the female, between the skilled migrant and the unskilled, between the migrant from South East Asia and the Expats from OECD countries- by the use of tactics like ethnic stereotyping, structural violence and the technologies of control inflicted on the guest workers, for example- different kinds of visas provided to them based on their skills, sponsors retaining workers» passport controlling their mobility, regulating their salary, their forced confinement and restrictions on their channels of communication thus, mapping them in a system of «structural dependence».

From an outside onlookers viewpoint- one cannot find any dearth of empirical material to support the claim of power imbalance in favour of the kafeel. Nevertheless, a complete understanding of a power relation needs that the analysis is built on a threefold approach- as seen by the onlooker, as told by the dominant actor and an account of the dominated, for this one has to understand the application of Kafala as a technology of control and surveillance of the migrants.

## **From Kishanganj to Racecourse: What Determines the Labour Migration of the Surjapuri Community?**

**Jiyaul Haque**, Research Scholar, Jawaharlal Nehru University, New Delhi

This paper explores the nature and social structure in a Surjapuri concentrated village of North-east Bihar where labour migration is prevalent. It includes a sociological overview as well as qualitative research based on interviews with migrant households. The study examines the nature and characteristics of labour migration to racecourses or horse races in Gulf countries and describes the socio-economic and political impact of remittances on migrant households. Furthermore, it discusses women’s restricted

economic participation and its relationship to upward mobility and the expanding religious practices among migrant families. It also investigates the emergent nature of change in migrants' attitudes, aspirations, and lifestyles influenced by urban practices. Despite the socio-economic effects, the paper also demonstrates the profound impact on political aspects of the village due to migration.

### **Pattern of Tribal Migration in Telangana State, India**

**Elupula Suresh**, Research Scholar, Kakatiya University, Warangal, Telangana

**A Sudarshan Reddy**, Former Faculty, Dept. of Economics, CKM Arts & Science College,  
Kakatiya University, Warangal

**B. Venkateshwar Rao**, Former Faculty, Dept. of Economics, CKM Arts & Science College,  
Kakatiya University, Warangal

Migration viewed as an instrument of integrating forest-based tribes with nation's main stream life and ensure economic stability, this paper examines as to how far these objectives are met by taking the aboriginals of Telangana state as a case. Taking Sen's capability approach, the study analyses the status of migration of aboriginals, the factors contributing and the consequences of migration in terms of household conditions and the economy at large. The review paper is prepared on the basis of available literature and three field studies conducted in the tribal belt in Adilabad (prior to reorganization in 2016) and present Asifabad *district* in the Northern Telangana state and five case histories collected recently for in depth understanding the dynamics of migration in this region.

There are 32 groups of aboriginals in the state and four major aboriginal tribes viz., Gond Koya, Kolam and Chenchus together forms a total number 5.48 lakh. This study covers Nayakpod, a sub-group of Gond, the predominant group showing greater mobility spreading in to 10 states and Kolam. Tribals are disadvantaged due to geographical and cultural isolation, low resource base, poor education etc. added to these infringement of traditional tribal rights for their livelihoods led to discontentment and protests both peaceful and violent. The paper shows that migration among tribes was intensified in the recent past, mostly among youth, in the form of short-term (temporary / seasonal / circular) migration rather than long term, as a coping strategy. Growing disinclination towards agriculture, early migrants influence, relative higher wages, passion for urban life compel these people to migrate. It is characterized as forced one born out of need for utilising surplus labour particularly, of youth, seeking work opportunity outside the village in non-farm sector, to make good the loss of subsistence by additional earnings, while closely attaching to the family. Traditional relations, attachment to the community deter them from permanent migration, consequent to this migration destination is for short distance and there is no interstate migration. More than 60 per cent is short distance migration in to neighboring towns and mandal headquarters, the longest being Hyderabad, the capital city and few districts being about 1/4<sup>th</sup> of migrants.

Migration destination is towards places of coal mines, construction, industrial towns and other petty activities. Exclusive non-farm employment by migrants constitute the highest (86.6%) followed by MGNREGA and marginally agricultural labour. As many as 25% are engaged in construction, transport and driving vehicles (30%). Another 1/4<sup>th</sup> work as agricultural workers in the neighbouring villages. Average number of working days in a year comes to 163.8 with variation and average wage per day is Rs 377. Annual

*earnings per worker works out to Rs. 57806/. Impact of migration is witnessed in some improvement in the living conditions of migrant households in the possession of modern gadgets like cell phones, TV, bicycles and two wheelers, than in the past. Due to lack of education and skills they are confined to hard labour with no security and stability of employment in the informal sector. Poor working conditions, long hours of work, low wages, humiliation and discrimination make them to rethink and seek alternative work opportunities. Case histories reveal frequent changes in occupations and places of work; provide an understanding of inner currents of migration and specificities attached to tribal migration.*

In the literature two reasons are cited for migration viz., ‘Survival for migration’, and ‘migration for subsistence’ the latter is rooted in subsistence and arises because of the need for supplement income to fill the gaps of employment and such communities migrate for shorter periods and do not ordinarily travel very far from their homes. (Dwivedi 2012). The present study lends support to this thesis. Road development, education and increased communication facilities in tribal areas as conceived to integrate tribals in to mainstream, though belated, is partially fulfilled (Appa Rao. T, 2015).

## **Migration and Development**

**Bharat Shah**, Retired Professor, M P Shah Municipal Commerce College, Jamnagar, Gujarat

In recent past, migrations have increased sizably within nations and internationally. Various factors influence inter states migration and international migration. Somehow or others, inter-states migrations and international migrations differs with various socio-economic and geo-political factors.

Pertaining inter-states migration in India, it is found that more than half population migrated from villages to taluka headquarters and / or district headquarters. Scholars opines that it is necessary to create better education facilities and basic infrastructure facilities in rural areas. Mostly, unemployed migrants leave their villages and place of origin for better employment and consequently, to improve standard of living, mostly, highly educated and literate youth. Whereas, uneducated and illiterate youth does not get any job opportunities in rural areas. Consequently, these unskilled and illiterate works migrate to urban areas to get blue-collar jobs. Hence, out-migrants from villages enters as in-migrants informal workers to near city, or taluka head quarter or district head cities. It is observed in various state’s capitals migrant workers has increased sizably. It is also seen remarkably that daily-up-down workers travel from small city to nearby big cities. e.g., between Ahmedabad to Surat and vice-versa.

In this paper, an attempt is also made to analyze, in-migration in various cities, states and internationally. An attempt is made to describe inter-state migration in India and intra-state migration pattern prevalent in Gujarat State.

Supreme Court of India order to prepare data-base for workers in June 2021, so that due to Corona pandemic situation prevalent in India, migrants gets benefits various government schemes. Under this scheme on 26th August, 2021 Government launched E-Shram (Labour) Portal.

Gujarat state ranks 14th for the registration on un-organized workers or say informal workers from E-Shram (Labour) portal. From E-Shram portal, it is found that 42.24 lakhs labourer were registered in the state. It is found that 8 districts in Gujarat has registered highest workers as per E-Shram portal. Under E-Shram portal, it is observed that most workers registered under agriculture sector followed by household workers, retail work, construction and apparels.

## **TECHNICAL SESSION 2.9**

### **Emerging pattern of Migration in the Context of Development and Social Exclusion: An Analytical Overview of Rural Jharkhand**

**Sai Ankit Parashar**, Research Scholar, Tata Institute of Social Sciences, Tuljapur

**Paloma Mitra**, Research Scholar, Tata Institute of Social Sciences, Tuljapur

**Ashwani Kumar**, Program Officer, Institute for Human Development, Ranchi

In this paper an attempt has been made to understand the emerging trends in migration pattern by intersecting development, displacement and social factors of tribe, gender and age. Data has been analyzed from 7 districts of Jharkhand, spread across 4 divisions, namely Gumla, Simdega, Palamu, Latehar, West Singhbhum, Jamtara and Dumka with a total of 258 respondents. Both qualitative and quantitative methods were employed using FGD's, Interviews and Survey methods to collect data. They were further computed using descriptive statistics in SPSS 2.0. The results indicate that the trend of migration pattern has increased with a rise in the percentage of female migrants. Bulk of the migrant population falls under the age group of 14. The type of migration is usually short term as most people migrate for 9 months and what is interesting is not the fact that it is short term but the percentage of people who engage in this type of migration as opposed to long term migration. This highlights the rampant exploitation and appropriation of tribal lands and forests for developmental projects, lack of public infrastructure focusing on education and health, inadequacy of alternate job creation and the failure of MGNREGA to provide any kind of security to the local population. In conclusion, few restorative suggestions for better policy planning have been touched upon.

### **Inducing and Sustaining Reverse Migration: Strategies and Way Forward**

**Vinita Yadav**, Professor of Regional Planning, Department of Regional Planning, School of Planning and Architecture, New Delhi

**Priya Bhardwaj**, Urban Planner, State Mission Management Unit (SMMU), AMRUT, Uttarakhand

SDGs target 10.7 relates to facilitating safe and responsible migration and mobility of people. State-level scenarios reflect a change in demographics induced by migration. People tend to migrate in the absence of opportunities of different kinds in their place of stay. In India, migration from the hilly region is a reality despite the existence of interdependence between the hilly and plain regions. The hilly region has natural beauty, religiously significant spaces, abundant water resources and a power generation facility. Despite having resources, people tend to migrate to other states? Why reverse migrants couldn't afford to stay longer in their home states and returned to the plains for their survival? The research aims to devise strategies to reduce migration from hilly regions. The objectives are to find out the reasons for migration from hilly states, the status of migration and reverse migration and

strategies to increase reverse migration and retain it at the hilly state level. The research is primarily based on secondary data sources obtained from the government's published and non-published sources to obtain the status of the migration. In-depth interviews with selected samples to gain an understanding of the factors responsible for migration and ways to boost the economy for sustaining reverse migration. The study establishes that the main factor causing migration is the lack of livelihood options. The disaster also impacts severely the people staying in the hilly regions. Better employability along with the creation of infrastructure facilities would be a boost for the hilly region.

### **Spread Effect of Labour Migration at Alang Recycling Industry**

**Hrudanand Misra**, Professor, Institute of Management, Nirma University, Ahmedabad, Gujarat

**Dhyani Mehta**, Assistant Professor, Institute of Management, Nirma University, Ahmedabad, Gujarat

Migration is pretty much as old as mankind's set of experiences. The enormous development of population in present day times has wide friendly, monetary, political, segment and financial ramifications. The untalented work moves from their natives to destination don't expect an exceptionally high financial increase as on account of gifted labourers or profoundly instructed people. The essential need of incompetent workers is fundamentally for a nonstop work consistently. The movement of this sort is considered as relocation from immature locale to created district or in reverse area to advance locale. Alang recycling industry is known as world's biggest Ship recycling yard, which employees 30,000 works straightforwardly, and 1.5 to 1.6 lakh works by implication in downstream and upstream businesses. In Alang recycling yard larger part of the workers are relocated from various underdeveloped regions of the nation viz, U.P., Bihar, Orissa, Jharkhand and Gujarat. The current paper deal with the relocation of work from their native place to Alang ship recycling yard and their effect on the close by district and industry. The focus of this paper is to on the process of migration to Alang transport breaking yard and furthermore on development angle because of movement. It is found from the study both 'push' and 'pull' factors have their influence on migration. Further, it is found that 'push' factors have been more important than 'pull' factors. Spread effect of the ship recycling industry it is found that industry exhibit both direct and indirect linkages to different industries and also found that ship recycling industry has strong backward as well as strong forward linkages with various industries within the region or outside the region.

The course of migration is just about as old as mankind's set of experiences. It is seen that distinctions are winning in the socio-economic advancement of the various states and region inside. A huge extent of works utilized at Alang ship recycling yard are migrants from various states. They are to a great extent from in reverse territories of Uttar Pradesh, Bihar, Orissa and Jharkhand. Just a little extent of labourers is from Gujarat state for example 5-10 percent.

The reasons for movement are profoundly significant during the time spent relocation. Among the reasons for movement detailed in the current review, it is seen that both 'move around' factors have their impact on relocation. Minimal in excess of 35% referenced 'pull' factors are the fundamental driver of their relocation and 65 percent referenced that 'push' factors as the most significant. So, it is

found that 'push' factors have been a higher priority than 'pull' factors. Taking everything into account, it is seen that the main source of relocation is joblessness in the provincial regions which is the chief reasons for movement. The current concentrate additionally discovers that 58% migrants moved out of the rustic regions as a result of non-accessibility of work at the spot of beginning. Another significant push factor is low fixed property (5.3 percent) of the migrant at their local spot. It is seen that the significant 'pull' factors, which cause relocation of country workers, is generally great wages at Alang when contrasted with their local spot.

It is finished up from the investigation that larger part of the respondents has moved from rustic regions because of low pay, joblessness and connect at Alang. These works are not monetarily solid at their local spot and moved to acquire their occupation at Alang transport breaking yard. The concentrate likewise helps organizers and strategy creators to carry out provincial improvement projects to diminish country out-relocation.

From the above conversation on spread impact of the ship recycling industry it is observed that industry display both direct and indirect linkages to various ventures. In general, it tends to be reasoned that the boat breaking industry has solid in reverse just as solid forward linkages with different enterprises inside the district or outside the area. The boat breaking industry produces an immediate work of 30,000-40,000 and an expected aberrant business up to 1.6 lakhs.

### **Addressing Material Deprivation through Remittance in West Bengal, India**

**Bhaswati Das**, Associate Professor, Jawaharlal Nehru University, New Delhi

**Rabiul Sani**, Research Assistant, Jawaharlal Nehru University, New Delhi

**Pranamita Banerjee**, Senior Research Fellow, Jawaharlal Nehru University, New Delhi

A substantial proportion of rural migrants are quick buck earner and send remittance at home with an intention of returning back. The remittance is not only being spent on utility and social goods but also towards asset creation. The present study tried to address two objectives: i) to understand the remittance sending and saving behavior and ii) to explore whether asset creation done through migration addressing the material deprivation.

Due to lack of macro data, the study is entire based on primary data collected from rural areas of West Bengal. West Bengal is an emerging heavy out-migrating state and migrants from rural areas are mostly poorer, unskilled or semiskilled, illiterate or semiliterate. This is an emerging area of international migration. A total of 550 migrant households (HH) and 350 non-migrant HH was covered from 127 villages across 8 districts, namely Paschim Medinipur, Jhargram, Birbhum, Murshidabad, Maldah, Dakshin Dinajpur, Cooch Bihar and Darjeeling of the state. The districts are wide spread across the states. The survey was conducted during November 2019 to March 2020. The study has used descriptive statistics and constructed standard of living index following the weightage parameters as used in National Family health Survey.

There is hardly any difference in remittance sending pattern by religion, social groups, marital status, educational status, duration of migration and HH size. However, substantial difference in remitting behaviour is observed among agricultural and non-agricultural HH. Remittance sending behaviour fades away as the chances of returning back fades away. The chances of returning back fades away the most for the non-agricultural families.

Out of 588 migrants only 529 sends regular remittances and only 75 percent HH could save some money whereas 25 percent could not save any amount from remittance because of their precarious poverty condition. Amount of remittance send and saved is much higher for the international migrants who have migrated to Middle-eastern countries.

### **Do accessibility of Social Security Schemes Stop Temporal Migration? Survey Evidence from Scheduled Tribes of Rayagada District in Odisha**

**Kalu Naik**, Research Associate, ICAR-National Institute of Agricultural Economics and Policy  
Research, New Delhi

Migration to the informal sector for the livelihood reason has been widespread and perpetual phenomena in the era of industrialization and urbanisation. This has led to increased socio-economic complexity in the contemporary society. Poverty and vulnerability is persisting throughout the world and it affects the greater segment of population without proper access to sufficient social security. Under the special provision by ILO convention No.102, emphasis was given to the marginal sections of people to reduce vulnerability, deprivation and poverty especially among the migrants. The existence of social security schemes can help poor and marginal section of people to get better livelihood and employment benefit through government assistance. The present study attempts to examine the impact of social security schemes on the tribal migrants by using the primary data collected from a (n=360) sample households both migrants and non-migrants during 2015-16 and 2016-17 in the Rayagada district of Odisha which constitutes one of the backward district of Kalahandi, Balangir and Koraput (KBK) region. Applying the binary logistic model, the study finds that the social security schemes are universally accessed by the people and also fairly accessed by the sample households at the place of source. It is also found that in spite of better social protection accessed by tribal households; mostly young people are willing to migrate. As the young mass are aspiring to have urban life style (maintaining smart phone, smart TV and super bikes etc.) with independent source of income, they tend to migrate. Further, it is found that significant improvement of income and creation of future assets has enabled them to access better standard of living. Furthermore, the study has suggested that state should come up with comprehensive policy measures to support and protect social as well as economic rights of migrants at source. Though the government has undertaken short-term policy measures to stop the temporary migration by providing guaranteed wage employment and livelihood promotion at household level, it has not been substantially prevented it. Therefore, keeping in the view the fact that at the ground level there must be sufficient social and economic protection schemes provided to generate ample livelihood in order to end the curse of temporal migrations among the marginal sections.

## **Challenges of Reverse Migration in Varanasi during COVID-19**

**Anup Kumar Mishra**, Head, Department of Economics, DAV P.G. College (B.H.U.), Varanasi

All human beings, irrespective of race, creed or sex, have the right to pursue both their material well – being and their spiritual development in conditions of freedom and dignity of economic security and equal opportunity. The makers of the Indian Constitution gave sanctity to such movements by guaranteeing freedom of movement and freedom to settle in any part of the territory of India as a fundamental right of all citizens. This freedom helps to integrate the country and secure its unity by removing internal barriers against movement and settlement. Notably enough, India had been experiencing a pre-pandemic slowdown economically as well, and the COVID-19 has helped in magnifying pre-existing risks present in India's economic outlook. However, the economy is facing severe economical and health crises and the most affected segregated section of the society from this catastrophic calamity is the poor migrant workers. Their current situation is seriously distracting and pathetic for any civic society. The last two years have laid bare the reality that, even before the pandemic hit the country, far too many people were living on the edge. Thus, the Corona crisis is a wakeup call for the government to think and act for the common and vulnerable people and for confronting the structural obstacles of the economy.

### **Life Satisfaction and Its Correlates:**

#### **An Exploration into Quality of Life, Dispositions and Contexts**

**Divya Pradeep**, Faculty with Department of Economics at Christ University, Bangalore, Karnataka

**Adaina KC**, Faculty with School of Arts and Sciences, Azim Premji University, Bangalore, Karnataka

This paper explores the link between life satisfaction, an important dimension of subjective wellbeing and Quality of life. It also explores the association of life satisfaction with personality disposition and contextual factors like mood, sleep quality and significant life events. This cross-sectional and descriptive study was conducted with a sample size of 325 Northeastern inter-state migrant workers engaged in various formal and informal jobs in Bangalore. We also explore the association between other domains of satisfaction such as satisfaction at home and job satisfaction with the relevant quality of life indicators. We use the self-reported questionnaire as the tool for data collection. Life satisfaction is a single-item measure while Quality of life is measured along eight dimensions. We find a number of quality of life dimensions such as housing quality, job quality, environmental quality, social connections and personal security to be positively related to life satisfaction. A gender segregated analysis shows that women fare poorly with respect to men in terms of personal security and this requires policy attention considering its wellbeing effects. Domain satisfaction at work reveals a positive relationship with work-life balance, job quality, and health status. Here again, a gendered analysis shows that women fare worse off on health in comparison to men and, therefore, can have wellbeing implications at work. Within the specific realm of job characteristics, one can see life satisfaction to be positively correlated with availability of social security such as pension and provident fund benefits, as well as employer provided

## **Reverse Migration, Returnee, and Entrepreneurship Initiatives in Bihar: The Silver Linings**

**Indu B Sinha**, Senior Fellow (Visiting), Institute for Human Development, New Delhi

The paper argues that pandemic–crisis, whereas exposed the vulnerabilities of the migrants, it has also highlighted their strength. There were some silver-linings amid deep and dark clouds of despair. The paper underscores such silver-linings through Cases, Events and Trends; constructed mostly, on the basis of print-media reports and direct information obtained from district administration. Media highlights those events which make news. These Cases are just examples and indicative of trends. This necessitates further investigations in order to know more about such efforts and also to see how sustainable these efforts are. This requires a broad-based research attempt.

Pandemic-led lockdown and subsequent, reverse migration of 28 lakh workers during 2020 in Bihar, posed an unprecedented challenge before the state, with the first and foremost responsibility to arrange for them livelihood; and generate sustainable employment. The state government, instead of devising short to mid-term strategies for rehabilitation of the Returnees, utilized MNREGS and other ongoing schemes as the immediate ‘relief-provider’ to the greatest possible extent; and focused on creating ‘sustainable employment’ avenues for them. With this perspective, district administration across the state planned to set up small-scale industrial units, initially involving small fund and small strength of workers, but with a futuristic strategy to continue it for longer to become sustainable.

The Returnees, responding to the opportunities, provided by district administration, decided to transform their skill into entrepreneurship. The first initiative, a Start-up Zone with clusters consisted of 168 industrial units came up in West Champaran, called Chanpatia Model, which was endorsed by the state government as the ‘coveted model’; and worth replicating in all districts across the state. Provisions for setting up Cluster of at least 5-Industrial Units in each district in order to engage Returnees were made; and in at least 20 districts, this scheme was reported to be implemented. This paper through three Case Studies (from West Champaran/ Chanpatia Model, Muzaffarpur, & Chhapra districts) demonstrates the process of transformation of skilled workers into entrepreneurs, and through these initiatives is created – the first silver lining amid pandemic-crisis. The second type of groups of Returnees, on their own initiative and worth, created their private manufacturing units, at home, in villages; and successfully, transformed themselves into self-employed persons, while creating employment for their colleagues as well. Two cases from two districts (Kishanganj and West Champaran) as representative of this second silver lining demonstrate that this typology of private entrepreneurship is dependable and sustainable. This typology is reported to be found in all migrant-source districts in hundreds; for instance, in Purnea district, at least a few hundred Returnees have set up their small business units; and declined to go back to destinations.

Some silver linings were also perceptible in farm-sector; first, investing into farm-equipments, tractor, in particular, in order to generate additional stable income from rent-market; and, second, large-scale participation of Returnees in farm-work, which significantly, increased transplantation during cropping season, leading to bumper harvest! Labour-shortage, during farming season 2020-21,

was nowhere to be found. Farm-sector became another big shock-absorber for the Returnees, who got on-farm work, as they arrived during farming season.

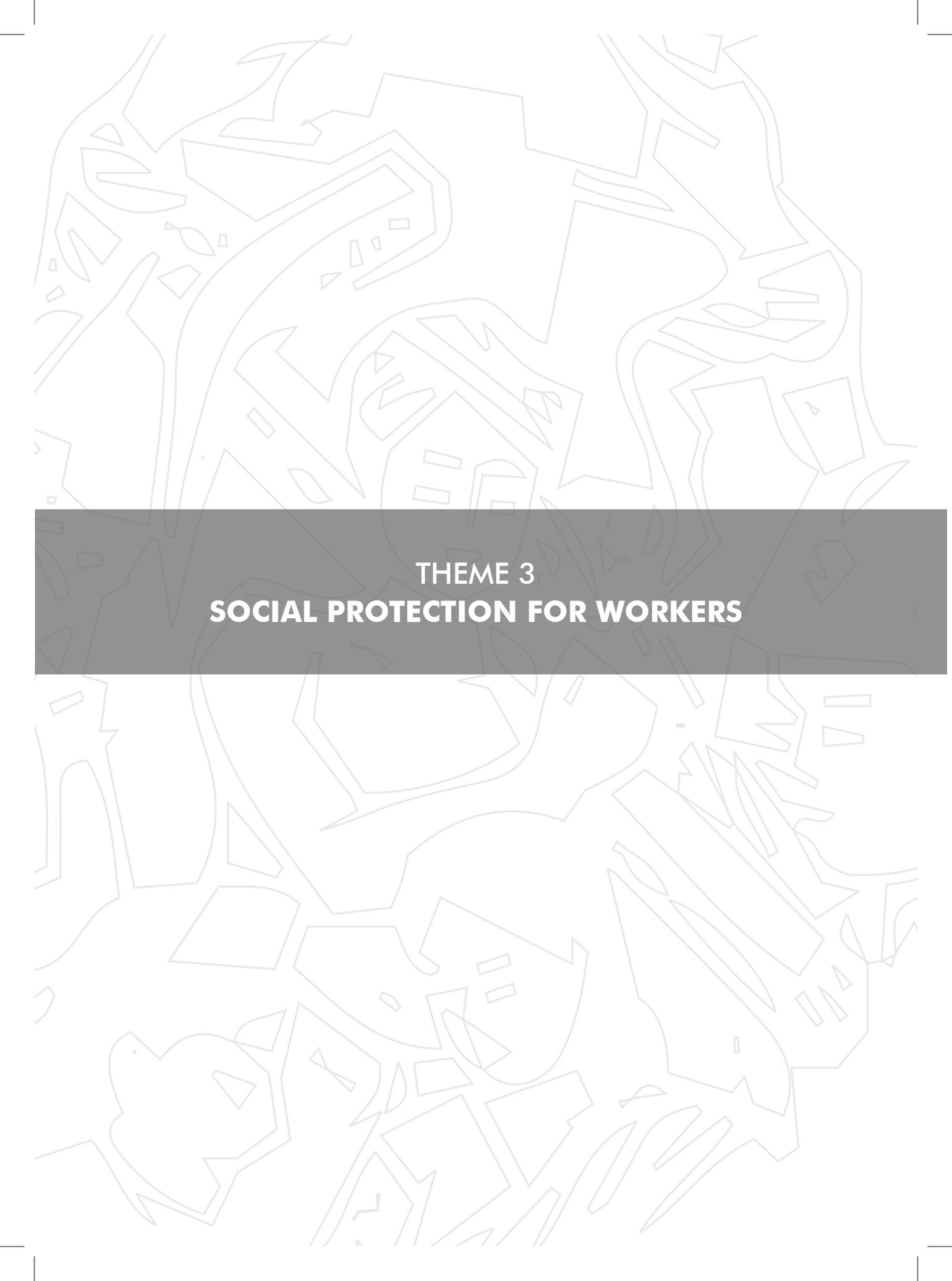
Bihar has immense potential to develop as a small-scale industrial hub with manufacturer of diverse range of products. Bihar has enormous potential to grow and expand as an economy with agro-product based processing industries including other allied industries. This story is about these 'silver-linings' created by the Returnees, who against the backdrop of dark, perilous, vulnerable pandemic days that exposed them to unprecedented all-count sufferings, have shown their strength to transform their trauma into an opportunity for them and their co-travellers (to destination); and consequently, transforming their efforts into contributing to development of the state economy. Pandemic has taught them many lessons, the most important of these, has been - they needed to make their base / home much more secure than before, because, home proved to be their last resort! This is something normally well recognised, but pandemic-perpetuated trauma made it glaring. Whereas economic cost of the trauma was well-understood, the extra-economic cost, such as deeper sense of insecurity, emotional and psychological deprivation, etc. were hard to cope with. Amidst this situation, home and home state was felt safer and secure.

### **Understanding Internal Migration, Inter-state migration and Reverse Migration of North-East India**

**Gayatri Gogoi**, Ph.D. Research Scholar, Department of Economics, Rajiv Gandhi University, Itanagar, Arunachal Pradesh

This paper attempts to study internal migration emphasizing on inter-state migration of the North East States of India. This paper provides a comparable study taking census data of years 1991, 2001 and 2011 of both in-migration to the Northeast states and out-migration (female and male) from the region and addresses the reasons for migration. The total out-migration rate is more for most of the states of North east, whereas for Assam and Manipur, the total in-migration rate is more according to census 2011. The paper also discusses reverse migration during the pandemic.





**THEME 3**  
**SOCIAL PROTECTION FOR WORKERS**



## KEYNOTE PAPER

### **Making the Right to Social Security a Reality for All Workers**

**Shahra Razavi**, Director, Social Protection Department, International Labour Organisation, Geneva

The right to social security has strong anchoring in international human rights law. It also forms a critical component of international labour standards. While social security has sometimes been portrayed as inimical to economic dynamism and development, there is a much larger body of work that posits a positive link between social welfare and economic progress. These positive synergies have been re-discovered more recently by the proponents of the social investment state. The confluence of ideas recognizing the social, economic and political necessity of social protection resonated strongly with the international community, giving social protection a prominent place in the 2030 Agenda.

Despite the overall positive historical trend in the development of social protection schemes, many structural constraints stand in the way of making the right to social protection a reality for all workers, as Section 2 elaborates. The COVID-19 crisis has revealed stark gaps in social protection, with more than half of the world's population having no social protection cash benefit to fall back on. Workers in the informal economy have been particularly hard hit, with no recourse to social protection, as they were excluded from formal work-related protections as well as from state-provided social assistance that often targets the very poor and those outside the labour force. The proliferation of social assistance schemes with flat-rate benefits in recent decades, which is an essential element of rights-based national social protection systems providing coverage for some of the most vulnerable groups, will not provide adequate social protection for the working-age population when they need it. It will leave the majority of workers stranded, while only a privileged few will be able to afford the privatized and individualized market-based solutions.

Inspired by a different vision, one that seeks to formalize all economic units, especially micro-, small- and medium-sized enterprises and make the right to social protection a reality for workers in all types of employment, Section 3 show-cases a number of noteworthy examples of countries that have extended social protection to large groups of workers in the informal economy, combining contributory and non-contributory elements. This vision is particularly needed at a time when climate change adaptation, digital transition, and other drivers of transformative change call for the formalization of jobs and enterprises, while making it possible for states to mobilize the maximum available resources to be able to build universal, comprehensive and adequate social protection systems that can facilitate inclusive transitions.

The COVID-19 crisis has entailed important and on-going changes, elaborated in Section 4. The question is if this crisis will mark a turning point towards a more equitable and robust world capable of withstanding shocks and transformations while ensuring social justice, or if countries will succumb to austerity and piece-meal solutions that leave workers, enterprises and vulnerable populations defenceless, having to re-live the tragedy of the past two years.



## **TECHNICAL SESSION 3.1**

### **Scheme Specific Analysis of Social Protection in India: A Critical Analysis**

**Sarathi Acharya, I.CAwasthi, B.S. Mehta and Swati Dutta** Faculty, Institute for Human Development, New Delhi

Social protection in India, earlier restricted mainly to workers engaged in large industrial enterprises or to government employees, has over time spread to cover larger numbers in the populace. This paper attempts to assess various social security and protection measures at the all-India and state levels in select nine states, examining issues associated with their coverage, design, and implementation. It provides a broad overview of social protection schemes, following the four 'life cycle' principles of social protection, i.e., affordable health care; children's income security and care; adults' income security; and old age pensions. It also traces the performance of the all-India and state level trends in social sector expenditure. The paper finds that there are a total of 44 central schemes and over 200 state-sponsored schemes, adding to more than 240 schemes aimed at improving social protection/social security. Overall, the social sector expenditure as a percentage of the gross domestic product (GDP) was around 8% in 2020-21, but the actual expenditure on social protection would be less. These proportions are much lower than those in developed countries. The basic messages of this paper are as follows: (i) There is multiplicity and duplication in programme-design; (ii) There is lack of coordination among different programmes, departments, and states; (iii) There is discontinuity and frequent changes in programmes; (iv) There are problems in identification of beneficiaries; (v) Some schemes are launched without adequate baseline or financial information; and (v) There is inadequate monitoring and evaluation of the schemes. The paper also provides some thoughts on how to improve efficiency and targeting in the social protection schemes.

### **Labour Market Implications of MGNREGS during Pandemic: A Case Study in West Bengal**

**Dipanwita Chakraborty**, Research Associate, Institute for Social and Economic Change, Bangalore, Karnataka

**Parmod Kumar**, Director, Giri Institute of Development Studies, Lucknow. Uttar Pradesh

During the pandemic MGNREGS rose in significance as it was the only rescue option for the rural poor and reverse migrants and consequently Union Government also decided to raise the MGNREGS budget by 40 percent to support their sustenance. This paper measures the effect of MGNREGS on rural labour market, rural wages and gender wage discrimination with study area as West Bengal, one of the leading agrarian states of India. Results of 300 households selected from three villages with

variable performance showed that in tune with macro picture, MGNREGS at the Panchayat level also was giving push to the exploitatively low farm wage rate through 'promotion' of alternate employment opportunities. MGNREGS, instilled contestability during agricultural peak season and rise in wage rate took place at variable degree in the three study areas. Though farm wage exploitation persisted as in none of the study areas the labourers reported receiving wages in tune with their Value of Marginal Production (VMP) or the State Stipulated Minimum Wage Rates (SMWR). To the satisfaction, the quantum of person days generated under MGNREGS during agriculturally thick period and the reduction in extent of under-payment with respect to VMP and SMWR for that cropping period was found to be moving in the same direction. Nevertheless, the rise in the wages caused by virtue of MGNREGS was highly disproportionate with regard to gender, as observed within each of the surveyed regions. The pace of rise was greater for male than female. As a result of this, the degree of under-payment to women also increased and gender-wage gap persisted, in fact, at places widened. The prime alleged reason for this was respective Panchayat bias for giving more MGNREGS work to men as a result of which women stood at a disadvantage state while negotiating for higher wages in farm sector. However, on a positive note, the extent of exploitation was inversely proportional with the intensity of work allocated in a particular season under MGNREGS.

### **Examining the Feasibility of Social Insurance for India's Informal Workforce**

**Santosh Mehrotra**, Visiting Professor, Centre for Development Studies, University of Bath, UK and  
Professorial Fellow, Nehru Memorial Museum and Library, New Delhi

Social insurance has very limited coverage in India. This reality has not changed since independence; one of the greatest failures of the development strategy India adopted in the early fifties. It has been estimated from the NSO's Periodic Labour Force Survey (PLFS 2018-19) that as much as 91 per cent of the labour force are in informal employment, (i.e. without any social insurance). This is barely down 2 percentage points from 93% in 2011-12 (NSO's 68<sup>th</sup> Round). In fact, regardless of the growth rate of the GDP, this high share of informality in the workforce had not changed until 2012, and when it fell recently, it did so by merely 2 percentage points. The remaining 9 per cent of the workforce has varying levels of social security in the form of provident fund, paid leave, medical insurance, and other benefits.

Informality of the worker is defined by the ILO as essentially a work arrangement wherein the worker has no access to social security. This paper spells out the design, architecture, and cost of a social insurance system for India's informal workers.

This paper is organised as follows. Section 1 spells out the principles that should guide social insurance for informal workers in India. Section 2 examines, in the light of those principles, the issues with the latest Social Security Code (SS Code 2020) passed by India's Parliament, one of four laws that cover supposedly all subjects related to labour welfare: minimum wages, industrial relations, occupational health, and safety, and finally, social security for organised and unorganised sector workers.

Section 3 lays out the design and architecture of what a social insurance system for India could look like. The goal remains that over the next 10 years, social insurance should cover the entire workforce, in accordance with ILO Conventions. Section 4 examines the fiscal cost to the Union as well as the state governments. The final section concludes the paper.

### **Overplaying-Welfarism and Social Security: The Case of the Karnataka Building and other Construction Worker's Welfare Board**

**Manjunath Gangadhara**, Additional Labour Commissioner (Industrial Relations),  
Department of Labour, Government of Karnataka

**Kaushik Chandrasekaran**, Research Intern, Department of Labour, Government of Karnataka

**Lekha Suki**, Research Intern, Department of Labour, Government of Karnataka

The Union Ministry of Labour and Employment notes that the unorganized sector of workers constitute about 93% of India's labour workforce. Despite the presence of a vast majority- the role of welfare policies and their impact on the unorganised labour workforce has largely been unascertained. This can be seen with the exclusion of unorganised workers with the various benefits under the new labour codes, despite substantive recommendations by the Parliamentary Standing Committee on Labour on the same. The Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996 provides for the establishment of State Welfare Boards that use the construction cess collected to formulate various welfare schemes for the benefit of construction workers. The Supreme Court in the year 2012 expressed grave concerns about the ineffective utilization of funds by the State Welfare Boards and in this regard a Model Welfare Scheme was formulated in 2016. Using data from the annual reports of the Karnataka Building and Other Construction Workers Welfare Board-this paper finds glaring inconsistencies in the current schemes formulated by the Karnataka Building and Other Construction Workers Welfare Board such as the inclusion of schemes not envisaged under the Model Welfare Scheme and not meeting the necessary conditions envisaged under the Model Welfare Scheme to name a few. The paper compares the schemes along with the ILO's Convention 102 on Social Security- asserting that despite India being a non-signatory to the convention- its mandate on the minimum standards of social security needs to be followed. Such disparity in formulation of welfare schemes not only ensures that the intended beneficiaries of such schemes continue to be left out on the result of welfare, it adds an unnecessary burden on the State both in terms of expenditure and resources. The paper recommends significant policy reforms such as the removal of schemes contrary to both the Model Welfare Scheme and the ILO Convention 102 on Social Security and larger transparency on scheme wise expenditure for better implementation of welfare schemes by the Karnataka Building and Other Construction Workers Welfare Board.

## To Link or Not to Link: How Aadhaar Impacts the Delivery of Welfare in Jharkhand?

**Anjor Bhaskar**, Azim Premji University, Bengaluru

**Arpita Sarkar**, Ambedkar University Delhi, Delhi

**Preeti Singh**, Azim Premji University, Bengaluru

Despite the several claims for success, MGNREGA has often been criticized on accounts of corruption and regular diversion of wage funds. Critics of the workfare program have called it wasteful, ineffective, leaky and have claimed that it is a drain on the public exchequer .

In 2015-16, in a bid to find a one-stop solution to many of these concerns, the government introduced the technology-led ‘magic bullet’ called “Aadhaar”. The intent to bring in this new form of e-governance tool in MGNREGA is to categorically detect and weed out ghost beneficiaries.

In the Aadhaar payment mechanism, wages are transferred to accounts linked to workers’ unique identification numbers through the Aadhaar Payment Bridge (APB). According to the government, the transfer of wages directly into the workers’ account through an APB addresses the concerns of timely payments, bogus cards and identity frauds. It has been claimed that adopting the new system resulted in a saving of 20,790.45 crores (roughly 10 percent of the total expenditure on wages under NREGA) up to March 2019.

Linking MGNREGA to Aadhaar is supposed to benefit in the following ways. First, it should improve transparency in MGNREGA payments as wages are credited directly into wage seekers bank accounts and thereby, enhance their financial inclusion. Second, it should ensure timely and correct payments to the workers. Third, it should nullify fudging of muster rolls and fake musters through Aadhaar authentication. Fourth, it should support the disbursement of payments at the doorstep of the wage seekers. Finally, it should secure effective monitoring of the payment flow.

Despite these claimed benefits of revolutionising welfare delivery, numerous reports and accounts point to issues arising due to the linking of welfare with Aadhaar. The two major issues include a decrease in transparency of payments for the workers and difficulties in tracking payments, exclusion of genuine beneficiaries.

What is the overall impact of Aadhaar on welfare delivery? We try to understand this through a case study of MGNREGA in Jharkhand. We survey nearly 3000 workers in 8 villages in Jharkhand to assess both the costs and benefits of linking MGNREGA with Aadhaar, with a focus on its impact on errors of inclusion and exclusion.

## **TECHNICAL SESSION 3.2**

### **Wage Policy for Unorganised Workers**

**Dipak Kumar Singh**, Additional Chief Secretary, Government of Bihar, Bihar

An important provision for regulation of wages was the Minimum Wages Act, 1948, now subsumed under the new Code on Wages. The Act like the new code, empowered the appropriate Government to fix minimum wages including their review and revision, for employees working in specified employments. Bulk of employments fall in the state spheres and state governments are required to fix/revise wages and ensure their implementation in respect of scheduled employment within their spheres. As majority of the unorganised workers work without any specified or written contract, their wages are governed mainly by the minimum wages fixed by the central or the state government. These wages, backed as they are, by a statute and enforcement mechanism, can go a long way in ameliorating their conditions, if they are determined through a scientific method, at a decent level and enforced adequately. Considering that negligible percentage of unorganised workers get round the year employment, the offered wage level is highly insufficient for a decent level of living, let alone for saving to meet the exigencies or family events. Further there is no statutory provision or convention of progression from unskilled to the higher categories of semi-skilled, skilled and highly skilled; nor is there any correspondence between the skill level measured by the NSQF certification and wages.

Decent level of minimum wages can be taken care of by fixing a National Minimum Wages. The new code also provides for this under section 9. The Economic Survey of 2018-19, too, had advocated that India needs to have a mandatory national-level minimum wage to promote social justice and curb distress migration. Satpathy Committee recommended a methodology for fixing minimum wages. It is shown that a vast majority of casual workers are receiving wages which are lower than one recommended by the Satpathy Committee. This is especially striking in case of female casual workers. The enforcement of the minimum wages regulations are also not satisfactory. Thus, the public policy regarding regulation of wages for the unorganised workers have fallen short of expectation in providing decent level of wages, based on sound scientific principles, progression of workers to higher categories based on experience or certification and in establishing correspondence between the skill level and category.

## **Disease Burdens and Disease-specific Morbidity among Tea Garden Workers of Assam**

**Rajshree Bedamatta and Nayanakhee Sarma**, Professor, Department of Humanities & Social Sciences, Indian Institute of Technology, Guwahati, Assam

Before the COVID-19 pandemic took the global health and economy discourse by storm, the world was grappling with the epidemiological transition and the dual burden of diseases afflicting developing countries' populations, particularly those in the working-age group. Globally, though there has been an a transition from the burden of communicable diseases to non-communicable diseases (NCDs), in the less developed countries, such as India, communicable diseases and NCDs were still high. Within India, the poorer states showed a much more significant burden of both communicable and NCDs. So, while an epidemiological transition has been witnessed, the rate and proportions of disease burdens differed across different regions; rural-urban differences were particularly stark.

Our paper explores the health status of tea garden workers of Assam, which has been highlighted as low on human development achievements. Primary data was collected from 414 tea garden worker households from Dibrugarh and Tinsukia districts in Assam in September 2021 and February 2022. For comparison, the self-reported and disease-specific morbidities across India and at the district level in Assam were also estimated, based on the NSSO unit-level data from the 75th round in terms of the number of persons reporting morbidity per thousand population. Findings show that the dual burden of disease prevails across states in India and also districts of Assam. The reporting rate is meagre in Assam, with some districts having zero reporting for some of the disease categories. Assam shows a deficient level of reporting of ailment for acute (19 per 1000) and chronic ailment (6 per 1000) when compared with the highest reporting state of Kerala (74 per 1000 and 181 per 1000, respectively). Comparing disease-specific morbidity as an in-patient (IP) of the medical institution during the last 365 days and for a spell of an ailment of household members during the last 15 days across states shows uneven geographical spread. Most of the southern states, along with the northern states of Delhi and Punjab, show a higher burden of NCDs. In contrast, the northeastern states and Rajasthan, Uttar Pradesh, Madhya Pradesh, Jharkhand, Odisha, and Chhattisgarh show a higher burden of infectious diseases.

At the state level in Assam, females (23 per 1000 population) reported more ailment as compared to males (15 per 1000 population) for acute or short-term ailments, whereas there is equal reporting of chronic ailment for both males and females (6 per 1000 population). Reporting is higher in urban than rural areas. According to the National Sample Survey (NSS), region-wise in Assam, reporting is highest in Western Plains (35 per 1000 for any ailment and 14 per 1000 for chronic ailment) and lowest in the Central Brahmaputra Plains.

Disease-specific morbidity at the state level in Assam for IP of medical institutions in the last 365 days shows equal reporting of infectious diseases for males and females. The reporting is higher in the regions of Cachar Plains and Central Brahmaputra Plains. For NCDs, the reporting is higher among the females (3 per 1000) than males (2 per 1000), in the urban population, and in Western Plains (14 per

1000). Disease-specific morbidity for a spell of ailment reported during the last 15 days shows more infectious diseases among females (11 per 1000). Infectious disease reporting is highest in Western Plains, followed by Eastern Plains.

The preliminary findings of our primary study of 414 tea garden worker households show that the overall dual burden of disease is high among the workers, unlike the NSSO findings of low reporting at the district and state level in Assam. The most common NCD reported among the workers is hypertension. Anaemia and gastritis were also widely reported. Among the communicable diseases, tuberculosis was seen among the workers apart from common cold and fever. Occupational hazards, such as body and backache, cuts, and injuries, were commonly cited.

Even before the pandemic struck rural and vulnerable sections of India's population, the dual burden of infectious and non-infectious diseases were causing havoc among the working-age population. Morbidity directly affects work productivity, resulting in earnings losses. Our study on the morbidity status of tea garden workers is hugely relevant as the tea industry is the business epicentre of Assam. Methodologically, our primary data on the morbidity status of tea garden workers also fill the reporting gap as experienced in the National Sample Survey Office (NSSO) findings.

### **Inequality of Opportunity (IOP) in India: A Machine Learning Approach<sup>1</sup>**

**Balwant Singh Mehta**, Senior Fellow, Institute for Human Development, New Delhi

**Siddharth Dhote**, Research Associate, Institute for Human Development, New Delhi

Equality of opportunity is the core principle of distributive justice in a society. Inequality of opportunity (IOp) is defined as the part of overall inequality that arises from factors beyond the control of an individual (circumstances) such as parental education, caste, gender, region of birth etc. and is thus considered unfair. Hence, it needs to be controlled and compensated. Previous studies reveal that, Indian society suffers from substantial inequalities, if these inequalities are arising due to circumstances beyond the control of an individual, then they may be deemed unacceptable and call for compensation to those who have suffered due to inferior circumstances. Given this background, it becomes important from an academic as well as policy point of view to estimate the extent of inequality due to different circumstances of people in India. This study will help in understanding the roots of prevailing income inequality, and developing policies aimed at bringing equality in India.

In this paper, IOp for India is estimated by using data from Periodic Labor Force Survey, 2019-20, where consumption and wages/income are considered as outcome variables, and caste, gender, parent's education, parent's occupation, region as circumstances variables. Overall inequality in consumption and income ranging from 0.25- 0.30. On the other hand, the relative IOp results reveal

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<sup>1</sup> This Paper is part of the Inequalities project and is part of one of the outcomes of the project that requires research papers prepared for the project to be presented at conferences.

that around one-fourth of the total consumption and income inequality can be attributed to individual circumstances such as and caste, gender, parent's education, parent's occupation, region. In addition, the opportunity tree shows that parental background (both education and occupation) and caste are the most significant contributory factors underlying unequal opportunity in Indian society, which can be tackled and addressed with appropriate policy interventions.

### **Measuring Inequality of Opportunity in India: Evidence from National Sample Survey Data**

**Smrutirekha Singhari**, Associate Fellow, Institute for Human Development, New Delhi

The distinction between inequality of opportunity and the more standard concept of inequality of outcomes is of interest to economists for at least three sets of reasons. First, if inequality of opportunity does affect attitudes to outcome inequality, then it may affect attitudes to redistribution and beliefs about social fairness. Second, there is a widespread normative view that inequality of opportunity matters for the design of public policy, since only differences due to opportunities should be the object of compensation by the state. Third, it has also been suggested that inequality of opportunity might be a more relevant concept (than income inequality) for understanding whether aggregate economic performance is worse in more unequal societies (and if so, why). In this context, this paper followed the conceptual framework developed by Ferreira and Gignoux (2008) for the measurement of inequality of opportunity, which derives two empirical tools directly from John Roemer's theory of equal opportunities. The first tool is a class of scalar indices that measure inequality of opportunity as the share (or level) of overall inequality in a given population which exists between social groups defined by different initial circumstances (rather than within these groups). The indices are inspired by the observation that, if opportunities were equally distributed, outcomes would be orthogonal to pre-determined morally irrelevant circumstances, so that the between-type inequality share would be zero. Because not all relevant circumstances are observed, the indices provide a lower-bound estimate of inequality of opportunity. Indices belonging to this class may differ along three dimensions: the inequality aversion parameter in the underlying inequality measure; the path of the decomposition, and the nature of the estimation procedure. We show that if we restrict our attention to path-independent decomposable inequality indices, the class collapses to a unique index, which can be estimated either parametrically or non-parametrically. The proposed parametric estimation procedure is a useful complement to the simple non-parametric decomposition both for data-efficiency reasons, and to estimate partial, circumstance specific indices. The second empirical tool is an opportunity-deprivation profile: the list of Roemerian types (i.e. social groups that share identical circumstances) that account for the lowest-ranked percentage of the population, when types are ranked by their mean advantage levels. The profile identifies the types with the lowest-ranked opportunity sets in society. If followed over time, they would allow a practical application of Roemer's (2006) suggestion that economic development might be measured by the rate of progress of the worst-off type. We applied these concepts to a rich data set of periodic labour force survey-2018-19 of India, which

contains information on a number of relevant pre-determined, morally irrelevant circumstances, namely: gender, caste, region, family background variables. We calculated our unique path-independent measure of inequality of opportunity both parametrically and non-parametrically, for the distributions of earnings, household per capita income, and household per capita consumption expenditure. As expected, the non-parametric method tended to systematically overstate inequality of opportunity when sample sizes were small. For larger samples, and in particular when using household income or consumption per capita as indicators of advantage, the two estimates were numerically close and the differences between them were statistically insignificant, generating a robust lower-bound estimate of inequality of opportunity. The opportunity-deprivation profiles - which document the enduring “costs” of being born of certain castes, in certain places and to certain families – suggest that unequal opportunities are an important source of the outcome. Overall, this paper seeks to lay the foundation for the measurement of inequality of opportunity, relating it to the relevant economic theory. We observe substantial variation in inequality levels in India – both in advantages and in opportunities. The inequality of opportunity persists across states and social groups in both rural and urban areas.

### **TECHNICAL SESSION 3.3**

#### **Universalization of Social Security remains Unfulfilled in the New Code on Social Security**

**Kingshuk Sarkar**, Associate Professor, Goa Institute of Management, Goa

Code on Social Security 2020 merges existing social security laws of the country and attempts to include informal workers within the ambit of social security administration. This Code apparently provided for the formulation of social security for unorganized workers. However, a closer examination of provisions of the Code reveals that the goal of universalization of social security remains an unfulfilled aspiration in the new scheme of things. Universalization of social security across sectors as a legislative right has not been explicitly incorporated. Hints are there but it skirted the matter tangentially and trivializes the existing provisions.

#### **Social Security Provisions for Bidi Workers – Opportunities, Challenges and Vulnerabilities**

**Sudeshna Sengupta**, Independent Researcher and Consultant, Gurgaon, Haryana

Bidi industry provides livelihoods to approximately nine million people in India, of whom about five million are bidi workers. So far, bidi workers were being regulated by sectoral laws. These laws, however, were being implemented erratically—adequately including workers in some pockets and excluding workers in some other. To a large extent, the implementation of the sectoral laws depended on the bargaining power of unions. To weaken the pressure of unions, employers had shifted production bases frequently to places where they found labour cheaper. They fragmented labour processes to prevent unionisation and also to keep workers outside the ambit of the laws. As a result, the majority of bidi workers today are home based, highly represented by women from socially marginalised groups representing intersectionality of multiple forms of deprivations.

Recently, there had been a number of changes proposed in the legal environment, especially in the realm of social security. The recently passed Social Security Code, 2020 proposes to subsume Bidi Workers' Welfare Fund Act, 1976 along with most other sectoral labour laws mandating social security to workers. The mandated schemes under the new code are yet to be detailed out. However, for bidi workers, processes had been rolled out on the ground after GST was introduced in 2018. Earlier Bidi Workers Welfare Fund was used to fund the provisions through seventeen Labour Welfare Offices across the country. The major expenditures were on health, education for bidi workers' children and housing. However, after Bidi Workers' Welfare Fund was inactivated after the introduction of GST, the welfare schemes had become central schemes and at present, and effort is on to amalgamate these schemes with the welfare schemes for poverty alleviation of citizens. As a result there is confusion on the ground and unresolved questions on how the newly initiated processes would converge with

the operationalisation of Social Security Code 2020 institutionally. There is need to understand the proposed new legislations in order to study the opportunities and challenges of this new legal environment. The new Code also does not clearly mention the future roles of the Labour Welfare Offices, which were earlier responsible for disbursement of benefits utilising the Bidi Workers' Welfare Cess Fund in a decentralised manner. If the welfare schemes meant for workers are merged with welfare schemes for the citizens, the new institutional mechanisms need to be fleshed out in detailed manner to address the convergence issues.

This paper investigates the physical and financial performance of the existing welfare schemes in recent years and the opportunities and challenges of the new legal environment. It discusses the issues that may emerge during transition and also points out to the challenges that may continue to remain unaddressed. At the end of the analysis the paper provides policy recommendations to ensure inclusion of all workers in different types of employment arrangements and universal access to social security benefits.

### **Capital Taxation and Direct Cash Transfer to Unskilled Labour: A Politico-economic General Equilibrium Analysis**

**Sushobhan Mahata**, PhD Scholar, University of Calcutta, Kolkata, West Bengal

**Sarbajit Chaudhuri**, Late Professor, University of Calcutta, Kolkata, West Bengal

**Ranjanendra Narayan Nag**, Associate Professor, St. Xavier's College, Kolkata, West Bengal

The present paper shows how cronyism is intertwined with political donations, capital taxation, direct cash transfer to poor unskilled workers and democracy. The existing literature is very scant in this respect in the domain of general equilibrium. The motivation is to fill this gap in the literature by explicitly modelling the political party's behaviour in an otherwise Jonesian general equilibrium structure. The novelty of our analysis is that we incorporate explicitly the atomistic behaviour of the incumbent political party in an uncertain political environment in a specific factor general equilibrium model. Unlike the existing partial equilibrium political economy models, the general equilibrium models with political equilibrium lead to a more superior analysis in terms of multi-sectoral interactions, resource redistribution among various sectors and in political activities etc. Capitalists' and the unskilled workers' forms separate lobbies which influences the political outcomes of taxation and transfers. The capitalist donates a fraction of their income to the incumbent political party which is used to finance election spending, on the other hand, the politician makes a cash transfer to the unskilled workers against which it earns favourable votes. This is solved using a two-stage game-theoretic model. We found that in a democracy the powerful incumbent politician is powerless in equilibrium. In other words, the incumbent politician at equilibrium loses control over the choice of capital taxation, this is because the politician's choice of capital tax rate to fulfil its political objective and the fiscal target is not independent action, but a reaction to the variation in economic condition. Moreover, we obtain the amount of direct cash transfers to poor unskilled labour as an optimal political choice rather than just welfare-maximizing choice. This is mainly due to the incumbent politician response which is partly

guided by national welfare and partly by its political payoff by regaining power in the forthcoming election. Thus, in this sense, this will not be wrong to conclude that democracy which is perceived as the most ideal form to rule a state may be detrimental and produce paradoxical outcomes.

### **The Labour Codes and Social Protection: Inadequate, Segmented, and Ill-Conceived**

**K.R. Shyam Sundar**, Professor, XLRI, Jamshedpur, Jharkhand

Labour laws have a long history in India as they date back to colonial period. Of the extant labour laws, the Workmen's (now Employees') Compensation Act was passed in 1923, the Trade Unions Act in 1926, the Industrial Employment (Standing Orders) Act in 1946, the Industrial Disputes Act (IDA) in 1947. Post-Independence in 1947, these laws were ratified to continue and new labour laws concerning various aspects of the industrial relations system (IRS) and the labour market were enacted mainly during the late 1940s and the next 15 years or so. By late 1970s, most of the extant labour laws were enacted including the Maternity Benefit Act, 1961. A few concerning the unorganised workers including the Unorganised Workers' Social Security Act, 2008 were passed during the post-reform period (1991 onwards). As 'labour' is in the Concurrent List, there are more than 40 Central labour laws and reportedly hundreds of regional labour laws especially concerning labour welfare. Many state governments have constituted labour welfare funds and several Labour Welfare Boards for their implementation. To implement and in consonance with the International Labour Organisation (ILO) standards, a strong and well-oiled labour administrative and inspection systems had come in place to ensure the implementation of labour laws at both the Central and the regional levels.

The Central government introduced reforms concerning the domestic industrial sector by liberalising them from many regulations relating to license and location among others. It has over the years since 1991 disinvested and/or privatised the central public sector enterprises (CPSEs). It has also opened up the economy for inflows of investment (foreign portfolio investment [FPI], foreign direct investment [FDI]), of trade (goods), technology, among others. Employers have persistently lobbied the government to introduce reforms of labour laws and the labour administration system, including labour inspection. The central trade unions (CTUs) successfully resisted the reform of the labour laws at the national level during the post-reform period. During 2019-20, the National Democratic Alliance (NDA) government enacted the four labour codes, the Wage Code (WC), the Industrial Relations Code (IRC), the Occupational Safety and Health and Working Conditions Code (OSHWCC), and the Social Security Code (SSC).

The international treaties that India have signed or been a party to their adoption in the international conferences, etc. and the Constitution of India influence and guide the making of labour laws and the policies concerning the industrial relations system (IRS) and the labour market in India. ILO's standards framework maps the components of social securities to be provided to the workers in a country and describes the aspects of the social protection floor to be laid down in a country. Together they define the conceptual and operational framework for the members of ILO. This paper considers

two ILO instruments, viz., Social Security (Minimum Standards) Convention, 1952 (C.102, ILO-CSS) and Social Protection Floors Recommendation, 2012 (R. 202, ILO-SPFR). The ILO's Labour Standards framework is presented in Section I. It also describes the basic aspects and principles concerning the standards and the Constitutional provisions relating to labour with special emphasis on social security and conditions of work. The ILO-CSS provides the minimum standards concerning various components of social securities. It lists nine components of social securities, viz., medical care, sickness benefit, unemployment benefit, old-age benefit, employment injury benefit, family benefit, maternity benefit, invalidity benefit, and survivors' benefit. The objective of ILO-CSS is to maintain an income stream for the workers and their families affected by various contingencies occurring in the world of work during work time and post-work tenure. The ILO-SPFR complements the ILO-CSS. The national social protection floors must comprise at least four elements, viz., (i) access to essential healthcare, including maternity care; (ii) basic income security for children, providing access to nutrition, education, care and any other necessary goods and services; (iii) basic income security for persons in active age who are unable to earn sufficient income, in particular in cases of sickness, unemployment, maternity and disability; (iv) basic income security for older persons. The paper concentrates on the core elements of social security at the national level which are covered by the SSC concerning both organised and the unorganised workers and the aspects of the occupational safety and health (OSH) which have implications for workers' income security.

In Section II, the existing institutional and legal framework relating to various components of social security on the one hand and those relating to industrial accidents are briefly described. Important labour laws, viz., the Employees' State Insurance Act (ESIA), 1948; the Employees' Provident Fund and Miscellaneous Provisions Act (EPFOA), 1952; the Maternity Benefit Act, 1961 (MBA); the Payment of Gratuity Act (PGA), 1972; and the Unorganized Workers' Social Security Act, 2008 concern the social security of workers including the contract workers employed in establishments employing between 10-20 workers, as the case may be. The Central law; Factories Act, 1948; and the Shops and Establishments Act (state law) define the institutional and legal framework for OSH.

Section III provides a summary of major provisions concerning social security for the organised and unorganised workers as provided in SSC and those concerning OSH, and analyse their shortcomings with statistical data. The two pillars of the critique of the SSC and the OSHWCC are, viz., neither of them has made significant advances in the direction of universalising the rights of social security and occupational safety, and health and social security is a matter of right for the organised workers in terms of laws and institutions and promises of schemes only for the unorganised workers. Some important gaps in the SSC are as follows: (i) it has merely reproduced the existing labour laws on social security such as EPF, ESI, PG, and MB mostly as they are and without alterations in the thresholds of applicability of them; (ii) it has diluted even the existing law relating to the unorganised workers in several ways and leaves the substantive social security to the to-be-announced Schemes. It has not unlike the NCEUS defined the rates of contribution to the proposed Social Security Fund for the unorganised workers; (iii) even though it has included gig and platform workers in SSC they have not been included in other three labour codes which means they are not included completely in the framework. They are

also not included in the ‘workers’ definition in the SSC. There is not even a scientifically established estimate or a census of the gig workers (even though Labour Bureau has proposed a survey); (iv) the data relating to the implementation of the USSW; (v) even though the Code includes ‘unemployment allowance’ in the definition of social security it does not provide for the same in it. The defence of the Central government that the scheme under the ESIA will cover the organised sector workers’ unemployment and the social security schemes for the unorganised workers would take care of the unemployment allowance is not valid. Analysing the unemployment insurance data under ESIA, the paper shows that very few workers have availed the insurance thanks to the tough conditions for its eligibility and low dissemination and inadequate coverage of areas and hence workers.

On the other hand, the OSHWCC subsuming 13 labour laws is also characterised by serious shortcomings, especially regarding workers’ safety. The paper focusses only on OSH in this Code, though in passing the regulations relating to the inter-state migrant workers (ISMW) are discussed. In the existing Factories Act, Chapter IV was introduced post-Bhopal Gas Tragedy in 1986. This Chapter applicable to the hazardous industries have attempted to make regulations relating to them strong. For example, in all the hazardous factories, a bi-partite safety committee must be compulsorily constituted. However in the OSHWCC, safety committees will be constituted in any establishment or class of establishments subject to a general and a special notification by the government. Also, it provides for the appointment of safety officers in a factory employing 500 workers or more, factories using hazardous factories employing 250 workers or more, building and other construction work employing 250 or more workers, and in mines employing 100 workers or more. Thus, the delimitation shrinks the OSH’s legal space. It also analyses the industrial accidents to show how scanty and inadequate the official statistics are while private surveys show a higher incidence of non-fatal accidents causing grave concern.

Thus, we see that the government has missed a historic opportunity to design the legal and institutional framework to ensure universal social protection to all the workers. The government has been working in fits and starts in this regard.

### **Challenges facing South African Indian Women in a STEM**

**Vanishree Pillay**, Senior Manager: Corporate Governance, University of Witwatersrand,  
Johannesburg

**Jenika Gobind**, Senior Manager: Corporate Governance, University of Witwatersrand,  
Johannesburg

This qualitative study enunciated the voices of a diaspora that remained absent in literature on South African Indian women in STEM. Data extracted from lived experience have provided an explication of the challenges experienced by twenty-five South African Indian women engineers in their profession. This article provides an exploration of an indentured history, coupled with personal context infamous for its’ culturally entrenched patriarchal undertones. This study was mapped against a professional context, a workplace dominated by men and strongly engrained in gender prejudice against women

engineers. Findings of this research highlighted firstly, the continued societal prejudice these women have endured based on the perceived socialised role of woman, more so, an Indian woman and her cognitive processing to remain motivated and driven in her role, as engineer in a male dominated South African workplace. Secondly, looking at the dominance of men in the engineering space and the effects of this trend on opportunity and development for women in the profession. The study contributes to literature on women in STEM in its consideration of an understudied sample of Indian women. It is envisaged that the findings of this study will unravel a lens that informs valuable insight into the challenges of a select group of diasporas. More, importantly, that the recommendations of this study will encourage relevant policymakers, as well as stakeholders within the engineering fraternity to look deeper into the challenges women face to date in the engineering profession in South Africa.

### **Is the Market Prosocial? Labour Supply Effects of Social Protection in Sub-Saharan Africa**

**Ismail Sanusi**, PhD Fellow, Ahmadu Bello University, Zaria, Kaduna, Nigeria

**Salamatu Isah**, Professor, Ahmadu Bello University, Nigeria

In response to the calls for universal social protection (USP2030) by the International Labour Organization (ILO) and other multilateral institutions, social protection programmes have become increasingly important for mitigating poverty and vulnerability in low- and middle-income countries (LMICs) (ILO, 2020; WFP, 2021; World Bank, 2019). Thus, many countries in Sub-Saharan Africa (SSA) are building up their social protection systems to cover more segments of the population. However, their impacts on the labour market have been questioned on several fronts, and one of the main debates is concerned with their distortionary effects on labour supply. Thus, evidence to this evolving hypothesis is twofold. The first, which also represents the dominant conventional wisdom, maintains that scaling up social protection could lead to reductions in labour supply via some sort of income effect which suggests that beneficiaries tend to lower their work propensity in favour of greater consumption and leisure. On the flip side, the other claim suggests that social protection can trigger a substitution effect on labour supply, which could lower the opportunity cost of work and thus lead to higher labour supply. This study seeks to answer the key question - what are the effects of social protection on labour supply in the context of SSA? In the absence of a cross-country evidence on the empirical relationship between social protection and labour supply, this paper explores the labour supply effects of social protection based on a unique cross-country dynamic panel data for 17 Sub-Saharan African countries. The paper estimates the social protection elasticity of labour supply using the econometric technique of Generalized Method of Moments (GMM). The panel data utilized is characterized largely by the existence of fixed effects, hinting on the persistence of substantial heterogeneity across the countries included in the sample. Estimates from the fixed effects-controlled one-step system GMM model suggest essentially that at any given time, a 1 percent increase in social protection expenditure would lead to a 2.9 percentage increase in labour supply. This suggests that public investments on social protection induce a substitution effect in favour of greater labour supply. The dominance of the substitution

effects over possible income effects is also robust to heteroscedasticity and autocorrelation. The overall implication of this result is that expanding public investments on social protection at a much higher scale could induce greater labour force participation and lower voluntary unemployment as a result. This can lead to higher incomes, poverty reduction, and lower levels of inequality over time. The results also imply the need for international financiers and donor organizations to continue to support active labour market policies especially the expansion of existing social protection programmes at scale because of their potential labour market and employment benefits. Finally, the study concludes that the labour market response to social protection is positive and desirable. The caveat is that the results from this study do not untangle the nuances of social protection nor x-rayed the mechanisms through which social protection programmes generate the kind of effects documented in the study.

### **Exploring Normative Ideas Underpinning India's Maternity Benefit Act: From Rights-based Approaches to a Feminist Political Ethics of Care**

**Meenakshi Krishnan**, Doctoral Researcher, Institute of Development Studies, Brighton,  
United Kingdom

Maternity benefits legislation sits at the intersection of labour and employment policy, care policy, gender equality policy, and social protection policy (Doucet et al, 2020) and offers a unique opportunity to examine the interlocking concerns of women's productive and reproductive work. This paper focuses on the social protection strand and examines how the state responds to tensions between women's 'worker' or 'economic actor' and 'carer' identities. It undertakes a gendered political economy analysis (GPEA) of maternity benefits tracing actors, interests, institutions, and normative ideas at play in the policy process.

Existing scholarship on women-related social policy in India has uncovered a *maternalist* bias (Nangia 2018) and *gendered familialism* ideology (Palriwala and Neetha 2011), where the state tends to conjoin caregiving of children with the female body (Nandy and Banerjee 2017). However, these studies fall short of theorizing why and how these gendered ideas hold sway in the policy making process. Furthermore, social protection policies in India have had a dualistic structure – either employment-linked social security or social assistance programs (Kabeer 2009). The Maternity Benefit Act is no exception, covering only small minority of women workers in the formal sector, and leaving the vast female workforce in informal employment out of its ambit of wage-linked compensation. Why does social policy in India continue to retain a maternalist focus and why do the majority of women workers continue to be denied a wage linked benefit?

I adopt a historical, interpretive process tracing methodology to examine the hundred-year history of maternity benefit legislation in India. I analyse four significant legislations– a) the first ever maternity bill tabled in the Central Legislative Assembly in 1925, b) the Bombay Maternity Benefit Act, 1929, c) the central Maternity Benefit Act, 1961 and, d) the 2017 amendment to the 1961 Act. While uncovering the gendered nature of actors, interests, formal and informal institutions within policy making, the research focuses on unpacking deeper, underlying background taken-for granted normative 'public

philosophies' (Schmidt 2008) which can be defined as ideas that are widely shared and commonly held by members of the society or polity. Then it traces the impact of these background ideas in foreground discourses on maternity benefits, especially through problem definitions, construction of target beneficiaries and policy design.

Empirical findings demonstrate changes in key actors and interests from the 1920s to the 2000s which have resulted in an originally paternalistic legislation, to protect the health and economic conditions of female factory workers in 1925, turning into an essentially maternalistic legislation by 2017 that centers the rights of the child, promotes exclusive breastfeeding, and reinforces women's traditional motherhood identities. Motherhood is framed as important for nation building and the care of future generations of labour. This is premised on the public philosophy of *mother-child as an indivisible dyad*. Demands for universal maternity entitlements appeared in the 1920s as social justice claims of nationalist reformers. However, the colonial state deflected all responsibility away from itself for social provisioning onto employers invoking the underlying philosophy of *welfare capitalism or corporate paternalism*. Successive legislations have maintained the same normative values and beliefs.

I argue that despite shifts in actors, problem definitions, and policy formulation of maternity benefits over the last 100 years, the normative ideas and underlying public philosophies informing the Act remain unchanged. The public philosophy of welfare capitalism, while underscoring the role of the market in supporting social reproduction, forecloses possibilities of extending universal, inclusive, and alternate mechanisms of coverage for maternity as a social and political right of all women. Similarly, the indivisibility of the mother-child dyad forecloses possibilities of engaging with women workers' labour rights on their own terms rather than as mothers, or of expanding the terms of debate to other actors in the care diamond (Razavi 2007) such as fathers.

My paper contributes to an understanding of entrenched normative ideas in the gendered political economy of maternity benefits as a social protection policy. Demands for universalization of social protections have been made within a rights-based paradigm (Srivastava 2008; Rao 2018). However, a rights-based approach to justice has been critiqued for its liberal-individualist orientation (Robinson 2006) which sets up frictions between rights of various categories and groups - carers and workers, mothers and children, employers and workers, state and markets, male and female labour, etc. To overcome these binaries, I posit a feminist ethics of care approach, based on principles of collective responsibility and mutual interdependence, as a more apposite political frame to embed new feminist normative public philosophies into discourses on universal maternity entitlements and care policy in India.

## **TECHNICAL SESSION 3.4**

### **Social Security of Informal and Gig Workers: Need a Discourse**

**Barna Ganguli**, Assistant Professor at Centre for Economic Policy and Public Finance (CEPPF), Asian Development Research Institute (ADRI), Patna, Bihar

**Amit Kumar Sinha**, Assistant Professor at Centre for Economic Policy and Public Finance (CEPPF), Asian Development Research Institute (ADRI), Patna, Bihar

Social security has very limited coverage in India. The schemes of social security only cover a small segment of the organized workforce, who have a direct and regular employer-employee relationship within an organization. While protecting entitlements are related to the employees, the compliance responsibilities largely rest on the employers. But in an economy like India where about 81 percent<sup>2</sup> of the labour force are engaged in informal employment, and who do not have social security cover, the discourse on policy decisions becomes the utmost requirement of the country.

As per the Periodic Labour Force Survey (PLFS) (2017-18), the total employment in both organized and unorganised sectors in the country was around 47 crores. Of this, around 9 crores are engaged in the organized sector and the rest 38 crores are in the unorganized sector. The workers in the unorganized sector constitute more than 81 percent of the total employment in the country. But this number is expected to have gone up due to Covid-19 and followed lockdown. A large number of unorganized workers are either home-based or engaged in small occupations like beedi rolling, agarbatti making, papad making, street vendors, brick kiln workers, etc. Gig and platform economy is another area that needs intervention as it mostly engages the youth. The nature of a job contract for a gig worker is different. The contract is usually of a shorter period and more specific to the assigned job. Their employment type is either temporary or contractual but certainly not regular. The nature of payment against the work is more of a piece rate, negotiable. The control at both sides are flexible.

As poverty and inequality increase, there is a pressing need to rethink insurance schemes. The pandemic has exacerbated the economic and social insecurity of those employed in the informal sector, reflecting a failure of policy measures. Thus, a coordinated response is needed between national and state governments to develop flexible and government-sponsored insurance schemes that provide social safety nets to informal, self-employed and gig workers in developing economies like India. If a unit is covered under the Employees' Provident Fund Organization or Employee State Insurance Corporation, then it is considered as the organized sector in India. The rest are informal. The outbreak of Covid-19 has shown that lack of any form of social security for this vast majority of unorganized sector workers can very easily lead to a crisis like situation (Mehrotra 2020).

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2 Periodic Labour Force Survey (2017-18), NSSO

The four new labour codes<sup>3</sup> which were introduced in 2019 and 2020 amalgamating 29 Central Labour Laws, were corresponding with the changing labour market trends and at the same time were accommodating the minimum wage requirement and welfare needs of the unorganized sector workers, including the self-employed and migrant workers, within the framework of legislation.<sup>4</sup>

Thus, to dig into the reality, the paper examines critically the schemes and provision for social security for the labour force in India, particularly for the unorganized sector and identifies areas that need transformation. Only formal sector employees in India comprising of the government sector, public sector undertakings, registered corporate sector and few private enterprises have access to certain social security provisions, even after 75 years of independence. This is primarily because the concept of social security in India is based on the outdated notion of the experience of industrialized countries, that considers an employer-employee relationship, and both contribute towards the social security fund, which then addresses the insurance needs of the beneficiary. Although the informal sector absorbs large masses of workers that would otherwise remain unemployed due to the absence of formal-sector opportunities, it is detrimental to the country's developmental progress. The informal sector consists of enterprises that are labour-intensive and have low-skilled labourers who are miserly paid to meet their subsistence requirements. Since unorganised firms operate outside the jurisdiction of the corporate law, workers are neither assured of job-security nor social protection. In addition to this is the gig and platform workers who are also not covered under any social security scheme. The paper will use PLFS and other secondary data available at government portals to assess the entire situation. Finally, the study will suggest certain solid interventions which may help the government to formulate robust policy for the informal and gig workers.

### **Is Regulation becoming the Root Cause for Violations? Examining the State of Labour in Indian Textile Industry**

**Nandini Ramamurthy**, Research Scholar, Tata Institute of Social Sciences, Guwahati, Assam

The article argues that violations result from overregulation, thus failing to establish a responsible supply chain and could not combat buyers' behaviour. A given condition of this debate is an asymmetrical relationship between buyers and other stakeholders (worker, supplier, and regulatory agencies). The literature argues that one way to overcome these challenges is by introducing and implementing variegated regulations (Amengual, 2010; Locke, 2013; Alexander, 2019). Based on this argument, the article explores regulation into two aspects—protectionist and market-oriented. The protectionist form of legislation is the state-led labour law and Act, comprehensive yet contradicting. Market-oriented compliance is a confluence of various regulatory frameworks such as private labour codes, multistakeholder initiative (MSI), voluntary corporate code of conduct, and hybrid compliance.

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3 (i) the Code on Wages, 2019, (ii) the Industrial Relations Code, 2020, (iii) the Occupational Safety, Health and Working Conditions Code, 2020 and (iv) the Code on Social Security, 2020,

4 Economic Survey of India, 2020-21

Both these regulators use the International Labour Organisation's (ILO) fundamental human rights as a source for deriving their labour codes. It goes to show that the radar of labour regulation expanded. However confining buyers' behaviour to a single or multiple regulatory agencies is becoming a formidable task.

The article explores various violation indicators and shows violations stemming from protectionist and market-oriented regulatory frameworks. Under protectionist governance, the primary forms of infringements are failure of the minimum wage-setting institutions, wage theft, social security appropriation, unregulated piece-rate and working hours. There are four types of minimum wage agreements in the Tiruppur textile industry—hosiery minimum wage notification, tailoring minimum wage notification, and two bilateral minimum wage agreements (2016 and 2017) drafted by trade unions. Despite the trade unions' efforts, the suppliers apply hosiery minimum wage notification as it has the least minimum wage. In a large company, the share of wage-theft is 23 percent, whereas, in medium and small units, the proportion is 44.64 and 56 percent, respectively. Typically, large companies are established beyond municipal limits to avoid insurance payments to their workers. Insurance is mandatory for factories within municipal boundaries, and suppliers corrupt government officials to prevent insurance payments to their workers. Bonus calculation is according to working hours to which government rates (8.33 percent) are applied.

Types of violations that can stem from a market-oriented compliance system are buyer penalty, cost appropriation, fragmented work structures, value share appropriation, risk transfer, and the dismantling of trade unions. They specifically outline the buyers' behaviour. The study of buyers' penalties originates from the lead time debate. It indicates that if the suppliers fail to deliver the goods as contracted (within 45 days), they must bear the shipment expenses (air freight). In most cases, the suppliers can become insolvent. Suppliers always look for ways to stop the rise of trade unions. Initially, it has been through outsourcing and subcontracting, and now it is through the workers' committee. Due to these interventions, trade union meeting at the factory level is limited to gate meetings. Suppliers have raised serious concerns over the implementation of certification and audit. In the case of accreditation, the suppliers believe that it results in duplication and increases the cost of compliance.

In most cases, audits are announced, and the duration is two days. It does not give auditors enough time to analyse the root cause of violations. Since protectionist and market-oriented compliances are sanction-based, it also does not allow regulators to understand the root cause of excessive regulation. Under the market-oriented regulatory framework, one can muster the multistakeholder initiative (MSI) arguments to reinstate state-led labour regulations. It is a long-term commitment from various stakeholders (especially buyers), and the underlying condition is workers mobilisation. Typically, it can reduce the cost of compliance and redundancy in the global supply chain. The article argues that a single regulatory framework can be effective, either protectionist or market-oriented. Either way, the method of compliance should not be on the line of sanctions or threat but by adopting a generalist approach, as Piore and Schrank (2018) argued. Combining the MSI and generalist approaches, the article argues for reinstating state-led labour legislations.

The study identifies four types of manufacturing units in Tiruppur: large, medium, small, micro, power table, and collective SHG for women. From each category, at least one unit is randomly

selected. The suppliers are of two types—first-tier suppliers and sub-suppliers. Large and medium are categorised as first-tier suppliers, based on the level of integration, while small, micro, and power-table are sub-suppliers based on specialisation and ancillary activities. The total number of sample units is six, the workers' sample size is 180. From each company, 30 workers are selected randomly. The study follows a case study approach and applies qualitative and quantitative research methods.

## **Social Health Protection and Publicly Funded Health Insurance Schemes in India- the Right Way Forward**

**Anandita Sharma**, Ph.D Scholar, Ambedkar University Delhi, Delhi

Social health protection (SHP) provides a rights-based approach to reaching the objective of universal health coverage (UHC), which stresses on the significance of financial protection and effective access to healthcare services. (ILO Brief, 2020) The ILO defines SHP as a series of public or publicly organized and mandated private measures against social distress and economic loss caused by the reduction of productivity, stoppage or reduction of earnings, or the cost of necessary treatment that can result from ill health(ILO, 2008). The social health protection system in India is a mixed and fragmented one. It includes a range of targeted health insurance schemes- like the mandatory and contributory social health insurance for factory workers and their families (ESIS, 1952), for central govt employees (CGHS, 1954) and a series of publicly funded health insurance-schemes (PFHIs) for low-income households including national-level schemes like RSBY (2008) and now PMJAY (2018) and state schemes like Rajiv Arogyashri scheme among others. This paper makes an attempt to understand the role of PFHIs in ensuring SHP in India. To achieve that objective, the PFHIs are analysed on three metrics- the coverage of population, the financial costs covered by the scheme and the pattern of utilization (public or private hospitals). This conforms to the various dimensions of SHP as envisaged by the ILO and the UHC cube as envisaged by the WHO. The study is based on analysis of secondary data from the nationally representative large scale survey data on health and morbidity from NSS rounds – 60 (2004), 71 (2014) and 75 (2017-18). For coverage estimates, NFHS Round 4 data and IRDA Annual reports are also looked into.

The first section of the paper briefly traces the historical trajectory of social health protection for labor in India and reiterates that the major policy question- how will informal sector workers be covered by a SHP scheme – remains largely unaddressed till present. It becomes imperative to answer then if the PFHIs- targeting the poor households of the country can be seen as an effective SHP strategy that can cover workers employed in the informal economy. It is a timely exercise to understand these schemes in detail, their contributions and associated problems in view of the raging pandemic that shows little signs of subsiding. An analysis of such schemes is crucial amidst rising vulnerability and deprivation (Whitehead et al (2021), Suryahadi et al(2020), Patel, Neilson et al(2020) among others) and the need for a social safety net especially in the LMICs(lower and middle income countries). The second section of the paper is divided into three sub-sections- the population coverage of PFHIs, the utilization under PFHIs and financial protection under such schemes. The analysis of population coverage shows that

there is poor penetration of PFHIs in India, a finding that resonates across different datasets despite varying estimates of health insurance coverage. Despite a few progressive results of PFHI coverage in India in the form of SC, ST, OBC population having a slightly greater per cent of their population covered under PFHIs than the general category and slightly higher coverage among casual labor in both rural and urban areas than the salaried, the all-India quintile-wise coverage of PFHIs showed a regressive and contradictory outcome. Higher MPCE quintile classes were associated with greater coverage of PFHIs. This anomaly was resolved by looking at state-specific quintiles distinctly for rural and urban areas separately. This corrected the trend to a great extent, and the result was further verified from NFHS data on RSBY.

The second subsection explored the utilization of healthcare in India under these schemes. Despite the country's health system's characterization as a dominant private sector, there is a rise in the utilization of public inpatient care and a fall in that of private IP care. This time-trend is seen for the PFHI insured as well. However, this is probably due to the public health interventions in the form of National Rural Health Mission (NRHM) and Janani Suraksha Yojana (JSY), rather than the health insurance schemes, as this shift to public hospitals was largely driven by maternal care. Data showed that the percent rise in public IP care was higher for maternal hospitalisations than for all other hospitalisations among the PFHI insured. The rise in utilization of public IP care was seen across states and quintile groups.

The third subsection of the paper sees the trends in financial protection in the country. From 2004 to 2017-18, the average real OOPE came down. However, on further disaggregation, it was seen that there is a fall in average real OOPE in public hospitals and a rise in OOPE in private hospitals. This trend reverberates across all quintile classes in rural and urban areas. Further, if public hospitals were utilized for treatment under PFHIs, the OOPE came down. For private hospitals, it did not. The percentage fall in hospitalization cases with medical expenditure exceeding reimbursed amount in public hospitals was greater than that in private hospitals in both rural and urban areas. For urban private hospitals, such hospitalisation cases in fact rose from 2014 to 2017-18.

From the available data of population coverage, the national estimates of PFHI coverage in the country shows a limited proportion of rural and urban population being covered. The period of study also corresponds to an expansion of public health provision especially through the NHM with a focus on certain conditions like maternity care. The changes observed in the health-seeking behavior of the population and, which is a shift to public hospitals and a decline in OOPE are not probably attributable to PFHIs rather to the efforts made towards strengthening the public health system. Existing studies analyzing the impact of PFHIs show that they tend to be concentrated in private sector and not have a positive impact on OOPE and equity in access. The policy focus on PMJAY as a solution for SHP for the country's informal workers needs to be evaluated accordingly.

In the discussion section of the paper, a comparison of PFHIs with ESIS is made. From the viewpoint of workers, is a contributory scheme like ESIS that offers much wider service coverage and has all the characteristics for achieving UHC, a better alternative to the government-sponsored schemes is discussed. Purchaser-provider split and strategic purchasing under PFHIs demand greater

attention as unlike any other commodity that is bought and sold in the market, healthcare is fraught with information asymmetries, externalities, and other characteristics that are unique to healthcare. The robustness of ESIS over the years, its legal mandate, greater financial protection and wider benefits make it a more favorable option to achieve the goal of SHP for the Indian workforce. The final section summarizes the paper.

### **Contemplating Citizenship Entitlements and Invisibility of Migrant Workers during COVID-19 Pandemic**

**Sonu Pandey**, Ph.D. Scholar, Jawaharlal Nehru University, New Delhi

The COVID-19 pandemic has exposed many fault lines in society by inflicting unprecedented disruptions and displacement, resulting in a health and humanitarian crisis. While the whole world has been affected by the pandemic, migrant workers are disproportionately affected. The pandemic has been cataclysmic for the migrants and has forced them into a state of hunger and desperation. It has also exposed the fragile and flawed nature of the state response and its protection policies almost non-existent for a substantial vulnerable population, particularly in the construction sector. The idea of the city's collective imagination as a place for equal opportunity and freedom is increasingly becoming a moot point as migrant status, and activity status becomes a key determinant of access to elementary needs.

Against this backdrop, the paper highlights the insecurities of workers in the informal sector, particularly the casual and self-employed workers who are least protected and have the lowest level of income. The paper attempts to distinguish between the orthodox social security measures and the more recent concept of social protection needed to deal with the rising insecurities, multidimensional deprivations, and fundamental causes of workers' vulnerability in the informal sector. It highlights the social security coverage extended to the informal workers in India, reasons for low coverage, and the perceived constraints for universalizing these services. It further discusses how globalization has changed the world of work and the lives of workers and the detrimental impact on welfare measures in the form of weakening of provisions. It advocates a shift in our approach from risk minimization to the prevention of fundamental causes of risk factors by considering the protective and the promotional aspect of social protection. It shows how a significant proportion of migrant workers are excluded from the State's purview just because of the flaws in their documentation and lack of robust social protection policies that have aggravated the suffering of migrants during the pandemic.

The plight of migrants raises some pertinent concerns vis. a. vis. their invisibilisation and the State's attitude towards them. A systematic inquiry contemplating the various dimensions and forms of citizenship exemplifies the stratification among migrant workers and their status as marginal citizenship. The paper accentuates that the plight of the migrant workers highlights various implicit dimensions of citizenship incompatible with the normative notions of citizenship. Further, it also highlights the preexisting fault lines between the various implicit forms of citizenship and the entitlements that come with it, which has once again invigorated the debates around the rights discourse.

Analyzing these recent developments from the framework of citizenship, rights, and entitlements gives us some insight into the plight of certain sections of migrants who lie at the margins of the vulnerability continuum. A slightest economic shock can push them into a state of hunger, destitution, and financial indebtedness. From this perspective, the present paper attempts to unravel the nuances of various elements of citizenship through deliberating upon some of the recent developments that highlight the plight of the migrant workers, especially the casual, contractual, and self-employed workers who have been out of the purview of the labour protective legislation and entitlements. Social citizenship has been an indispensable component of citizenship and a precondition for civic equality. It also advocates for recognizing social rights and entitlements through the rights-based framework to insulate the workers from economic and structural insecurities.

### **Labour Market Mobility and Women Empowerment under MGNREGS in Andhra Pradesh and Telangana: Alternative Strategies for Way Out**

**Srinivasa Reddy Mandala**, Faculty Member, Centre for Economic and Social Studies (CESS), Hyderabad, Telangana

**Brajaraja Mishra**, Faculty, ICFAI Business School, Hyderabad, Telangana

Developing countries like India is passing through a transitional stage, between feudal-agricultural societies to modern-industrial/technological society but still rural markets are imperfect and inactive. It resulted in reduction of employment for rural poor. With rural markets no longer able to provide employment to the poor, agricultural labourers have been forced to seek employment at outside agricultural sector for their survival. Distress migration has increased, during lean agricultural season, in particular. Considering this situation, Government of India (GoI) has introduced Mahatma Gandhi Employment Guarantee Act/Scheme (MGNREGA/MGNRES) to provide assured wage employment for the rural poor. This paper tries to analyze the impact of MGNREGA on the rural employment and workers' well-being in the Indian states of Andhra Pradesh and Telangana. In addition, the paper examines whether this provision of employment can help to empower the women. It also examines the potential of alternative policy strategies implemented by Andhra Pradesh for farmers' well-being and women empowerment. Besides using employment related data published at MGNREGS website, it also uses primary data collected from 18 sample villages in three districts of Andhra Pradesh and Telangana to understand various conundrum in the MGNREGS implementation process. This study also used the primary data collected by Institute for Development Studies Andhra Pradesh (IDSAP) from sample farmers across all the 13 districts of Andhra Pradesh to examine the potential of implemented Andhra Pradesh Community Managed Natural Farming (APCNF) in terms of farmers' well-being and women empowerment.

The study has found that MGNREGS was able to provide adequate wage employment for a subsistence living. It had a positive impact on rural livelihoods, on elimination of distress migrations from backward areas and promotion of women economic empowerment. The programme reached all sections of the society, irrespective of caste/class. The labour participation rate in the backward

districts is higher than that in developed districts. However, higher earning through MGNREGA is a short-term phenomenon because labourers could not invest in productive assets. But it has helped to raise wages rapidly and thereby improved bargaining power of landless poor in rural areas. Before implementation of MGNREGA, labourers had limited access to labour market; they could work in landowners' field as wage labour or permanent labour. Now, they have more choices to get employment through MGNREGA works in addition to the employment in agricultural sector.

MGNREGS is unable to create visible impact in the resource rich and agriculturally developed regions. Assured income/employment from agriculture limit the scope for involvement in MGNREGS during the peak seasons of the year. The programme has little impact on income levels of households and also on wage rate in these regions. But wage rates increased in less developed regions after implementation of MGNREGS. Therefore, this programme was beneficial for backward regions in comparison to the developed regions. The programme achieved its objectives of inclusiveness by securing the livelihoods of rural poor.

This paper also discussed the main characteristics of the programme that made it successful in both the states. It mentions that limitation of the programme to reach some of the sections in the society can be very well addressed by adopting APCNF that provides employment and income to persons throughout the year. This is also based on the goal of inclusiveness and women empowerment serving the landless, marginal and small farmers.

### **An Econometric Analysis of Social Security Contribution and Economic Growth**

**Mohd Rashid**, Research Scholar, Central University of Kashmir, Ganderbal, Jammu and Kashmir

**Tosib Alam**, Assistant Professor, Central University of Kashmir, Jammu and Kashmir

**Sushanta Kumar Tarai**, Research Scholar, Department of Economics, Berhampur University, Odisha

Social security contribution is an obligation towards a democratic country by any citizen. In turn, the concerned government should have some responsibility to enhance fiscal expenditure towards the welfare of society. Therefore, each government needs tax revenue from different sources. When we impose more tax on the labor class's income it indicates more tax pressure on workers. There is also variation in the life expectancy within countries due to variations in the socio-economic variables. This trend of demographics leads towards inequalities in a country, where the tax burden is the same for all categories except senior citizens. On the other hand, the same fiscal expenditure happens by the government for all citizens. The effect of variations in the age structure on government returns is relatively less understood. There are some people, who have a large amount of earning loss and consume differently when retired, but they are on an average wealthier than others. Different types of people have different incomes and patterns of consumption of goods and they are differentially taxed in many countries; social variations have fiscal consequences also on the returns side. Based on this issue, collection in tax revenue gets diminished which leads to an effect on government expenditure.

Hence in this regard, we have followed specific reviews based on this issue for our study on social security contribution and development in India.

Social security assistance is compulsory expenses compensated to the government that consults the privilege to collect future societal assistance. There are some other variables related to social security contributions. There may be positive or negative correlations with social security contributions. Hence, the study analyses the impact of tax revenue, expense, and life expectancy on social security Contributions using the secondary data collected from The World Development Indicators database (WDI) between 1990 and 2020. A quantitative approach in the valuation of information and its statistical analysis was carried out using the ARDL model. The empirical result shows a negative relationship of social security contributions with tax revenue, whereas a positive relationship with expense and life expectancy. Regarding the difference between social security contribution and tax revenue, a clear definition should be used. Hence, the study recommends if a household expects to have a major contribution to social security in life, the government should have an obligation to reduce the tax burden on the household by taking some advance reform in the tax structure. Moreover, higher longevity is a sign of growth and development in the society, and at the same time, as people live longer, increasing time spent in retirement exerts more upward pressure on costs for various public programs. Policymakers should undertake greater degree of reform in statutory elements of the tax system. As a result, it will determine the average and marginal tax rate in the country. Sometimes there is an issue of double economic contribution which needs to be addressed.

### **Impact of COVID-19 on Employee Performance: A Socio-Behavioural Study**

**Afzal Hassan Khan**, Junior Research Fellow, Birla Institute of Technology MESRA Ranchi,  
Jharkhand

**Manju Bhagat**, Professor, Birla Institute of Technology MESRA, Ranchi, Jharkhand

In the present day scenario employees are working from home as per the direction of the competent authority. One of the most common challenges that organisations are facing today is management of employees who are working from their homes. This paper aims to find out the impact of socio-behavioral factors like leadership, organisational support, and the work environment on employee performance. In this study, the sample was collected from employees working in Tata Consultancy Services (TCS) by a self-administered survey questionnaire based on the random sampling method. The analysis was done by SPSS and Structural Equation Modeling (SEM) by AMOS 25. The study's findings revealed that transformational leadership and work environment had a significant and positive impact on employee performance, implying that transformational leadership and work environment can boost employee performance in a work-from-home policy while organisational support shows no significant impact with employee performance.

## Expansion of Social Security in India and the Formal Economy

**Sunil Kumar Mishra**, Senior Fellow, Institute for Human Development, New Delhi

**Vikas Dubey**, Research Associate, Institute for Human Development, New Delhi

This paper examines the expansion of formal security in India. Using payroll data sets and the NSSO/NSO as well as narrating the experience of the formal workers and employers interviewed in two cities namely Delhi and Surat. Since the last several years, reform of the formal social security system has been fairly high on the policy agenda and a number of steps have been taken by the government to reform and expand the social security net in India by amending the provisions in the EPFO, ESIC, Maternity Benefit and by introducing changes in the implementation of the provisions of these Acts. These policy changes have resulted in the expansion of formal social security in India, particularly since 2014-15. This paper examined the pattern of enrolments under social security, using secondary data (NSO/PLFS/EPFO) from 2004-05 to 2019-20 as well as primary data collected from workers/employers/ trade union members in two cities namely Delhi NCR and Surat. Findings from the NSS/PLFS data shows that workers eligible for provident fund benefits increased from 29.6 million in 2004-05 to 47 million in 2018-19. Also, among the wage employed in the non-agricultural sector, the percentage of workers with eligibility to a provident fund benefit increased from 14.86 percent in 2004-05 to 19.80 percent in 2017-18. As per the EPFO data, net enrolment shown an increased trend particularly after 2015. The findings from primary survey shows that the workers who were working on an oral agreement are found to be more vulnerable and were exploited by employers as compared to workers having a written contract. The newly joined workers have a lack of awareness about different types of benefits provided and due to the uncertainty of jobs and the chances of losing out jobs many a time they were hesitant to enquire or to discuss these benefits with their employers. Most of the workers received salary on monthly basis but their overtime is calculated on hours basis. The employers used a dummy register in which he manipulates the number of days worked. This helped the employer to keep the basic salary at a lower level and hence the EPFO contribution was less. Some workers said that a higher proportion of PF amount was deducted from workers and the employers' share was less than the workers' contribution. The workers many a time could not question or ask the employers about their registration with the EPFO. Some workers said that those workers who raised voice against their registration to EPFO with the employer, they were fired from the job. Different establishments have their guidelines for registering the workers in the EPFO beneficiary list. In some establishments, they provide EPFO benefits from the day of their joining in the establishment but in some other establishments, the employers have a fixed period after which they allow the workers for the registration to EPFO. During the discussion, some workers said that they have to wait for 3 months to 1 year to get registered under PF. Some workers said that the actual amount deducted for EPFO worker's contributions was not the same as the message of deduction of the amount received by EPFO SMS. Finally, the paper concluded with recommendation that a frequent inspection as well as visit by the concerned EPFO officials is absolutely necessary. Also, the awareness of workers both the EPFO beneficiaries and non-beneficiary in the formal sector is a necessary requisite for an efficient functioning of the scheme.

## **TECHNICAL SESSION 3.5**

### **Human Security and Economic Vulnerabilities of Schedule Castes in Uttar Pradesh and Odisha**

**Chittaranjan Senapati**, Associate Professor, Giri Institute of Development Studies, Lucknow,  
Uttar Pradesh

The caste system is more prominent in India than the class society that poses insecurity among Scheduled Castes in different spheres of life. The objective of the study is to examine scheduled castes under the human security paradigm that depends on conditions, institutions, and processes. It is well stated that human security is about the condition of well-being. The paper is limited to the economic vulnerability of the Scheduled caste in Uttar Pradesh and Odisha. In the field, practices of caste-based social restrictions have been seriously affecting their economic involvement in various activities in the villages. This rur-ban district level study was conducted in both the states under mix-methods, focused group, and ethnomethodology techniques. The unsatisfactory implementation of rural development programmes in both states has rarely reduced the insecurity of marginalised. In that context, the present schemes of the State Governments for labourers are in no way helpful in raising their income or generating employment for them to change their present distress condition. The advent of the COVID 19 pandemic made the situation very grim for them. The vulnerability study considered that higher incomes and high economic growth alone are not enough to reduce vulnerability, conflict, and personal or physical insecurity in a country like India where caste-like institutions take an important place. Human security is a strategy against the vulnerability of individuals and communities. The prominent threats/insecurity of the scheduled castes in these two states are affected by atrocities, lack of democratic norms, poor governance, human rights violation, and social exclusion. Denial from development has created the constitutive effect of insecurity. The social indicators, good governance, civility, and education level can be catalytic to reduce vulnerability. The government should make effort to uplift them in the above parameters.

### **Impact of the COVID-19 Pandemic on Sanitation Workers in Rural India**

**Shamsher Singh**, Assistant Professor, FLAME University, Pune, Maharashtra

**Sabah Siddiqui**, Assistant Professor, KREA University, Andhra Pradesh

The COVID-19 pandemic has affected all domains of work across the globe, and the most impacted sections of workers are those who had few social security policies protecting them even in the pre-pandemic period. The COVID-19 pandemic exposed the already existing social and institutional apathy towards the profession of and the workforce engaged in sanitation work. Social security systems that should have protected the rights of sanitation workers failed to keep up with the new demands

and needs of this workforce. This paper elaborates on the working conditions of sanitation workers during the pandemic. At the end, it provides social protection policy recommendations that are vital to safeguard the working conditions, as well as health and safety concerns of these Corona-Warriors.

This research studies the impact of the COVID-19 pandemic on rural sanitation workers in Haryana. The research was carried out through telephonic interviews with forty respondents in July and August 2021. The study explores the challenges and risks faced by the sanitation workers in rural areas working as frontline workers, and the state's response to their health and protection. The survey reached out to sanitation workers in every district of Haryana. The responses received through the survey were analysed to take a close look at work conditions and unpack the complexities of performing this labour. The survey results show how already overburdened sanitation workers were turned into multi-purpose workers during the coronavirus pandemic. They performed as many as 24 tasks in addition to their regular duties of cleaning and disposing garbage. These additional tasks included working on infection prevention, setting up health infrastructure, and enforcing compliance with COVID protocols. This increased their work hours significantly, and some of them reported working up to four hours extra during the second wave of the pandemic. While being asked about any additional payment for the extra work, no one had received any extra payment.

Respondents spoke about their fears and concerns about working during the pandemic, and these were organised and categorised through thematic analysis into four types: (i) fear of contracting coronavirus, (ii) increase in the amount of daily work, (iii) hostility from members of the public while performing duties, and (iv) apathy from the government. Regarding the role of the state, it emerged that the government did not institute any social protection and welfare measures.

Based on this study, a number of recommendations to safeguard the well-being and welfare of the concerned workforce have been put forward. These include- provision of sufficient safety and protection gear for workers against the coronavirus, adequate testing and vaccination of the workers along with their family members, doing away with the discriminatory compensation and life-insurance policy and ensuring one amount of compensation and life-insurance cover across occupations involved in essential or frontline work during the pandemic, to strictly enforce the service norms and not using this workforce in tasks and duties beyond their service mandate, ensuring workers' consent before assigning any additional task and providing financial compensated for that work as per the norms.

### **MGNREGS – A Paradigm Shift in Employment Generation Scheme**

**Rivu Sanyal**, Assistant Professor, Charuchandra College, Kolkata, West Bengal

**Susmita Banerjee**, Associate Professor, Charuchandra College, Kolkata, West Bengal

Employment generation is of paramount importance for the economic development of any country. In India, despite high growth rate in the post reform period there is no significant impact on the employment generation and thus rate of unemployment remains high. And therefore government of India framed an employment generation scheme (MGNREGS) to address the concerns of the unemployed. MGNREGS is significantly different from its predecessors. It came into force from 2006.

It is the only scheme that would ensure job opportunity to all those (unskilled) who have applied for it. The scheme is also inclusive in nature, as it ensures mandatory one-third representation of women in the work force. The purpose of this paper is to judge the impact of the scheme upon the unskilled women, SCs and STs. For this purpose we have constructed a panel regression model. Here we are considering the state wise percentage participation of women in MGNREGS as a dependent variable. The independent variables are female literacy rate female ratio in population, female work force participation rate, and wage difference (MGNREGS wage- Average agricultural wage of female labourer) respectively. The study is based on secondary data. All the variables are cross sectional in nature and vary over time (2006-07 to 2017-18). The average participation of women in MGNREGS at the national level clearly implies an increasing trend throughout the time period. In a developing country like India a social safety net is required for the poverty stricken ,rural ,unskilled and mostly illiterate women folk who are always disadvantaged when it comes to the question of social and economic equality. It is beyond doubt that MGNREGS has improved the situation of rural women, SCs and STs.

### **Domestic Workers in Times of Covid-19 Pandemic in India: The Employers' Perspectives and the Matter of Legal Protection**

**Amrita Ghatak**, Assistant Professor, Gujarat Institute of Development Research, Ahmedabad,  
Gujarat

**Kingshuk Sarkar**, Associate Professor, Goa Institute of Management, Goa

The Covid-19 pandemic and subsequent lockdown has a dire impact on the domestic workers around the world. The pandemic has exacerbated the pre-existing issues and challenges for workers in the domestic workspace. One of the main consequences has been the reduction of working hours or loss of job resulting from fear and restricted mobility due to confinement measures during lockdown. After three months of strict lockdown in India during the first wave of pandemic their job-insecurity is further intensified both in terms of availability and securing deserving wages. Most of the gated communities in cities have put unreasonable restrictions on the movement of domestic workers and adopted extra-constitutional measures to prevent even willing households from engaging domestic workers going over and above the Govt. of India guidelines. Given this scenario, this paper makes an attempt to address, how employers perceive domestic workers and how those perceptions influence the status of employment, wages and working conditions as well as the employer-employee relationships in the 'new normal' state post strict lockdown phase in 2020. With a few exceptions the results stand for deterioration in the terms of employment and employer-employee relationships.

## **Maternity Leaves – Social Protection or Added Burden**

**Chaitali Wadhwa**, Research Scholar, Faculty of Law, Manav Rachna University, Faridabad, Haryana

**Versha Vahini**, Associate Dean, Faculty of Law, Manav Rachna University, Faridabad, Haryana

Custom dictates that women be the frontrunners in childcare. They are also breaking all barriers and performing exceedingly well in the professional sphere. This means that women must perform dual responsibilities of a mother and an employee. Working mothers face an added discrimination at work, where they are seen as less authoritative and more emotional. Pregnancy and maternity present employees with challenges not present in a male-dominated workforce. To ensure that women are not deprived of their basic rights and do not face human rights violations, most countries, including India, have enacted legislations. Maternity benefits safeguard the dignity of the mother, protect health of the mother and child, act as a welfare measure, and provide financial security. They allow women to enjoy her motherhood without tensions of the workplace. However, the law has several limitations, and employers have the sole duty of financing paid maternity leaves and making provisions of creches. Amendments in the law have increased responsibility. The COVID-19 pandemic has exacerbated their burdens, which have further impacted the employment of working women. The paper aims to critically analyze the maternity laws in India and study the impact of COVID-19 on maternity leaves.

## **Does MGNREG Scheme Influence Household Trust in Local Administration and their Political Participation? Evidence from Haryana, India**

**Rajender Kumar**, Professor, National Institute of Technology, Kurukshetra, Haryana

**Ankush Goyal**, Research Scholar, National Institute of Technology, Kurukshetra, Haryana

Trust is considered a cornerstone for successfully implementing public policies as it ensures cooperation between the state and citizens (Beshi & Kaur, 2020). Many empirical studies support the idea that social protection programmes influence public trust in government or political institutions (Evans et al., 2019; Kumar et al., 2021; Mishra & Attri, 2020). The Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) is a large-scale rural employment generation programme initially rolled out in 200 backward districts of India in February 2006 and further extended to the remaining rural parts of the country by 2008. The local administration has a high involvement in ensuring proper implementation of the programme at the village level. Some researchers found corrupt practices followed by the local administration in implementing this programme besides the positive welfare impact of the scheme. The prime purpose of this study is to investigate the effect of receiving employment benefits under the MGNREGS on the household's trust in the local administration and their political participation. The study is based on primary data collected through a structured schedule from selected districts of Haryana, India. A multi-stage random sampling method has been applied to select the final sample. The data for 597 households were utilised for final analysis. In order to analyse the collected data, the ordered logistic regression method was used. The major findings of the study indicated that MGNREG beneficiaries expressed a low level of trust and unfavourable attitude

towards local administration. They were also found less interested in participating in the village level meetings. Thus, it appeared that simply being a beneficiary of the MGNREG programme was not adequate to influence public trust in local administration.

### **Universal Basic Income: A Panacea for Economical Integration of Household Employment**

**Ambika Nair**, Assistant Professor (Sr.), VIT School of Law, Chennai, Tamil Nadu

**Vidhusha GV**, Research Scholar, VIT School of Law, Chennai, Tamil Nadu

The ILO law and practice report on domestic work offers a wide range of reasons why domestic work is “undervalued, underpaid, unprotected and poorly regulated” (ILO, 2010). Domestic Work Policy Brief No. 1 (Geneva) Conditions of Work and Employment Programme — advancing decent work for domestic workers. The meaning of value In economic terms, one can distinguish between valuation that is based on the cost of inputs, and valuation that is based on the value or price of the outputs produced. Domestic work, however, constitutes a special case in that the international System of National Accounts (SNA-1993) specifies that by definition the output produced by a domestic worker is equivalent to her wage (including in-kind payments), which is equivalent to her productivity. the Committee of Experts on the Application of Conventions and Recommendations (CEACR) has cautioned against undervaluing domestic work by setting the minimum wage for domestic work equivalent to that for unskilled workers (ILO, 2010, para 63). The CEACR has questioned the classification of domestic work as “unskilled work”, noting the complex tasks and responsibilities assumed by many domestic workers. The care diamond Razavi (2007) introduces the notion of the “care diamond” as a way of structuring thinking around the institutions that can provide care. The four corners of the diamond are the family or household, markets, the public sector and the not-for-profit sector. The concept of the care diamond is potentially useful in highlighting to what extent government considers care work similar to paid domestic work to be important enough to provide these services itself, or to subsidize or fund the provision of such services in some other way. Where government does this, it would suggest that government attaches significant value to the work. Government provision or funding thus becomes an indicator of value.

### **Analysis of Marriage Practices in the Informal Economy, Using Instrumental Variables on IHDS Panel Data**

**Binay Shankar**, Research Assistant, Indian Institute of Technology Kanpur, Uttar Pradesh

**Bipasa Banerjee**, Student, Tata Institute of Social Sciences, Hyderabad, Telangana

**Kajal Verma**, Student, Magadh Mahila College, Patna University, Patna, Bihar

**Shivani Mohan**, Student, Magadh Mahila College, Patna University, Patna, Bihar

Gifts are an integral part of wedding ceremonies. However, this marriage practice in the vulnerable informal sector violates the basic assumptions of economics, as income increases, the consumption will increase proportionally, as here it goes beyond the income and becomes a burden. Sometimes this

gifting also leads to constructive homicides. In this research, we have tried to study the causal-effect relation between the practices of exchanging wedding gifts and assets owned by the household. We have used unique IHDS household long Panel data only for the households – whose primary source of earning is from the Informal sector. We have used series of wedding gifts items as the outcome variables, assets as explanatory variables, and two instruments (1) due debt in HHs and (2) numbers of adolescent girls in HHs, along with a few controls. We estimated the pooled and panel instrumental variables regression using 2SLS estimator. We found that as there is an increase in the assets, the tendency of gifting increases. It shows the ineffectiveness of the number of policy measures taken to minimize the negative externalities of the wedding gift burden in society.

The ancient custom of gifting during the marriage by the bride's family is still prevailing strongly, also for the vulnerable section of the society. We have found few negative slope coefficients, i.e., as assets for an individual increases the tendency for gifting also increases. But we will have to consider that this love and affection by the bride's households may convert into the greed and necessity of groom's family, resulting in burdening the low-income groups. It may be countered that if the reach of education and formal employment increases in the informal sector, then this wedding burden might reduce. Alternatively, it may also be concluded that this burden will persist in the society as a sloth.

## **TECHNICAL SESSION 3.6**

### **Has COVID-19 Caused more Insecurity among Street Vendors? Analysing the Impact of COVID-19 in North-East India: A Case Study of Aizawl, Mizoram**

**Aayushi Lyngwa**, Research Scholar, Indian Institute of Technology, Kharagpur, West Bengal

**Bimal Sahoo**, Associate Professor, Indian Institute of Technology, Kharagpur, West Bengal

The world saw a slump in its day-to-day activity due to COVID-19 pandemic. The pandemic immensely effected the economies across the globe. While most economies faced unemployment and loss of capital. The effect of the pandemic on the informal sector was duly visible. The pandemic in India effected the informal migrants which were visually observed on the roads going back to their homes on foot. The loss of livelihood was a bigger threat than the risk towards infection for the informal workers. The street vendors come under this informal sector and are characterised as urban self-employed. Street vending is visibly observed operating on the street and footpaths of an urban setting. They cater to the needs of the urban poor and provide them a means of subsistence. During the pandemic, the street vending business was heavily impacted. The pandemic not only affected the loss of daily wage but it also impacted the means of livelihood for the urban poor. The present study is set in the tribal state of Mizoram. The state has the largest tribal population in North-East India. The state is cut-off from mainland areas due to the lack of infrastructural facilities. The tribal economies are relatively unique as compared to the mainland state economies. This is mainly because the tribals have their own ways of livelihood. The street vending business is the newly emerging activity in the state. Lack of agricultural productivity due to the traditional practices like slash and burn and low growth of traditional and small-scale industries has created a boom in the urban informal self-employment activity. The present study is a case study which was made to understand the reasons and the impact of street vending in the tribal economies. Additionally, the precarity of the street vendors due to COVID-19 lockdowns and its recovery during the most celebrated festivals was observed. We observed that women were more active as street vendors in comparison the male counter parts, this however, can be stated with the different in relation to the patriarchal structure in the mainland India where men are more active. Interestingly, we observed that apart from the adversity and severity in the income and savings along with the lack of improvement in the workplace condition of the street vendors during the rigorous lockdown periods. Street vendors through *shadow security* were able to meet their financial emergencies. This brought us to an important conclusion that social security cannot just be limited to the binary representation of secured and unsecured. There can be third wheel added to this factor, wherein in this case the vendors have their own source of informal security. The results stated can however, not just be limited to the precarity of street vendors in the tribal areas but can also be collectively depicting the precarity of the street vendors in the mainland India.

## Social Security for the Unorganised

**Kathyayini Chamaraj**, Vice-President SSAI-K & Executive Trustee, Social Security Association of India-Karnataka Chapter & CIVIC-Bangalore, Bengaluru, Karnataka

The Social Security Code 2020 (SS Code) passed in 2020 by Parliament without discussion, has almost nothing to give to the 93% unorganized workers, whose total lack of social security was made obvious during the pandemic and ensuing sudden lockdown. While the concept of rationalizing and merging all the disparate labour laws on social security into a single Social Security Code is welcome, the SS Code as drafted, gives almost nothing within the law to the 93% unorganized workers of the country. The rationalization and merging has also not happened effectively as disparate laws for the organized sector, such as ESIC and EPFO Acts, the BOCWW Act, etc., have merely been clubbed together. This has happened also because of the opposition of several trade unions to the rationalization and merging of extant laws and their demand for maintaining the status quo even though the extant laws have not done much in terms of providing social security to all. While there are specific commitments within the law for the organized sector, there are none for the unorganized sector. What will be given, how much will be given, how the benefits will be funded have all been left open in the case of unorganized workers. The several salutary suggestions of the Parliamentary Standing Committee on Labour have also not been heeded.

This paper presents a framework for providing universal social security which was arrived at by the Social Security Association of India – Karnataka Chapter. This delineates how social security with all nine benefits mandated in the ILO Convention 102 can be provided to all the unorganized workers of the country. It provides the framework for the eligibility of the unorganised as delineated by the National Advisory Council; the institutional mechanisms necessary for providing social security to the unorganised, similar to but apart from the ESIC and EPFO, which should be exclusively for the organised; the manner of collecting contributions from the employers of the unorganised based on their annual turnover or the total man-days of employment they provided in a year to the unorganised, this to simplify record-keeping by the micro-businesses that employ the unorganised; the manner of collecting a cess on certain taxes or royalty to raise the fund for the government's contribution; the quantum of benefits to be given; the decentralised manner of registering the workers and providing benefits through the panchayat raj institutions and the municipalities, etc.

### Domestic Workers' Social Protection during COVID 19

**Shravasti Roy Nath**, Research Associate, BRAC Institute of Governance and Development, Dhaka, Bangladesh

**Afsana Alam**, Research Associate, BRAC Institute of Governance and Development, Dhaka, Bangladesh

According to the Bangladesh Bureau of Statistics, the informal sector of Bangladesh employs 85% of its labour force. Among them, two million people are employed as domestic workers, as estimated by the National Domestic Women Workers Union (NDWWU). This paper looks specifically at live-out or

untied workers who work part-time under multiple employers and live in their own homes. Their jobs are characterised by a lack of formal contracts and increased physical proximity with their employers, along with accommodation in overcrowded, low-income areas. This made them highly susceptible to sudden unemployment as soon as lockdowns were mandated. A study on the urban poor, undertaken by BRAC Institute of Governance and Development (BIGD) and Power and Participation Research Centre (PPRC) shows that, over the two years of on and off lockdowns, domestic workers reported around 61% loss in income. For context, factory workers reported a loss of around 16%.

This study was conducted through phone interviews with domestic workers after the first lockdown was lifted. They were asked to recall their lives before the lockdown and the different coping strategies they have used since then. It also reviews the available protection mechanisms intended for domestic workers at the time of COVID19.

Being excluded from the Bangladesh Labour Act (2016) meant that domestic workers were not privy to any of the funds created specifically to be used by the working population in emergency cases. In cases of social protection or security, it is seen that state initiatives are not explicitly targeted towards domestic workers, but intended for vulnerable populations of all types. Access to state initiatives also relies on proof of citizenship. Our study shows that domestic workers, often being rural to urban migrants, do not have relevant documentation at hand. In some cases, especially in case of limited availability, access to cash or food transfers depend on social connections with local state representatives. Overall, the respondents have faced notable barriers to accessibility and developed unique coping strategies. We find that domestic workers primarily depend on social capital and the benevolence of others for their survival in cases of economic emergency. This included an allowance of delayed rent payment as well as buying of daily necessities on credit, both options only available as a result of charitable intentions. In some cases, prior employers offered to send some money through mobile banking systems. As the lockdowns extended, domestic workers had to choose between the safety of their lives and earning a livelihood. It is increasingly clear that donations are an unreliable emergency plan and domestic workers would hugely benefit from a reconsideration of the social security strategy, as well as a reframing of the labour laws to increase the attention to domestic workers. This assures that they are seen not only as a destitute portion of the society but also as earning members of the labour force.

## **An Analysis of Code on Social Security, 2020 in Light of Hardship Faced by Unorganised sector amidst Pandemic COVID-19 in India**

**Niimisha Kaul**, Research Scholar, University School of Law and Legal Studies, Guru Gobind Singh Indraprastha University, New Delhi

The sufferings of the migrant workers amidst pandemic Covid 19 have exposed the already existing protection gaps in our country and policymakers must not ignore the persisting social protection inadequacies that disproportionately affect some specific populations, such as informal labourers and migrants. Though a lot of people lost jobs amidst the pandemic Covid 19 but the sufferings of these migrant workers are incomparable. We all witnessed that just after a few days of lockdown they all were struggling to go back to their native places and were trying different modes of communication. The Central Government and various State Governments did try to do help by providing shelter, food and mode of commute. But these are short term measures and what is important is to provide long term measures to strengthen them economically so that they can take care of themselves in future if such kind of situation happens again. Thus, the need for strong social security laws and schemes so that if such uncertain times again comes in the future, they can survive the wave and take care of themselves and their family. There is a strong need to universalize social security in India. Through the SS code, both the Central and State Governments are going to provide a different set of social security measures, as has been provided under Sections 109(1) and 109(2), respectively. The same has been discussed in this paper in the preceding section. But, this seems to be making the whole system complicated and there seems to be no rationale behind these divisions. There is a requirement to simplify and avoid multiple authorities. It should be something simpler like Employees' Provident Fund Organisation (EPFO) which exists for the organized sector. It is imperative, that employers of the unorganised sectors should take the responsibility of providing social security to their unorganised workers because they are getting an advantage through the workers. Though welfare legislations existed even before pandemic Covid 19 due registrations had not been carried out as pointed by NHRC in the impleadment application filed by them on the suo moto case on the plight of migrant workers. Thus, the migrants were not receiving the funds marked for them which were to be directly transferred to their accounts. The E-shram portal is working on filling this gap. This is the reason that section 142 of SS was notified by the Ministry as mentioned earlier. This section aids Ministry to register all the beneficiaries under various schemes for the unorganised sector. This is a welcome step. Government must also introduce some welfare schemes which is specifically for unemployed workers, especially in the unorganised sector as they are economically weak and thus, could not take care of themselves during the unemployment phase of pandemic Covid 19 and wanted to rush back to their native place. If such a scheme existed, a lot of suffering of these migrant workers during the pandemic Covid 19 could have been avoided.

## Interventions and Governance

**C.Muthuraja**, Head, Post Graduate and Research Department of Economics, The American College, Madurai, Tamil Nadu

Social protection is defined as the set of policies and programs designed to reduce poverty and vulnerability by promoting efficient labour markets, diminishing people's exposure to risks and enhancing their capacity to protect themselves against hazards and interruption/loss of income. Social protection consists of informal labour markets, social insurance, social assistance, micro and area-based schemes to protect communities and child protection. Social protection plays a vital role in ensuring income security for workers through decent work for all. A social protection system includes preventive and remedial schemes, informal networks and formal systems operated by Governments, local authorities, enterprises of employment and non-governmental organizations and others. The social security systems had an efficiency function, facilitating employment with an objective of encouraging workers to acquire skills and to remain in the labour market so as to make use of them.

Workers in modern societies depend mainly on income from work in order to have access to the goods and services produced and provided by others. A temporary or permanent drop in income may result from a range of *eventuality*, of which unemployment is just one. Unemployment, sickness, disability and aging can affect individuals throughout their lifecycle. The basic aim of social protection is to protect people from uncertainty and poverty that may result from the vagaries of the market and the eventuality. Social protection is redistributive in nature, transferring income from the more to the less fortunate.

Sustainable Development Goals (SDGs) acknowledges a pivotal role of universal social protection ensuring its coverage, access and quality. It promotes nationally defined social protection floors, focusing on social protection for children, working age, old age and health protection. The pandemic has prompted us to revisit the importance and necessity of universal social protection in the country. There are many social protection schemes that would need to be considered in each state, consulted upon and prioritized. Social protection interventions should focus on the program's coverage and benefits, its efficiency in targeting vulnerable groups and specific gender issues, the sustainability of the program and the adequacy of its institutional arrangements and the program's integrated approach.

This paper aims at study on interventions and governance of social protection measures with special focus on protecting workers, women and children from unprotected and unhealthy situations. It suggests ways and means to make interventions by government and other institutions to bring sustainable social protection through social and gender concerned policies and programs. It also recommends that government must effectively concentrate on social protection governance through sustainable public policy, effective use of social determinants like living conditions, urban planning, revival of rural infrastructure and livelihood, education and nutrition. Since our system of governance is depends on federal government, we must concentrate on integrated functions of union, state and local governments. Social protection/security measures, food security measures and other social assistance programs must be focused with sustainable, gender neutral. Community participation, involvement

of private sectors through corporate social responsibility and institutional social responsibility, civil societies and global partnerships are essential for sustainable social protection governance. Governance issues can be dealt with use of digital technology and appropriate digital technology policy must be planned for smooth execution.

### **Plight of Labour amidst COVID-19 in India: A Case Study of Workers and Employees**

**Saravanan Velusamy**, PhD Student, Jawaharlal Nehru University, New Delhi

COVID-19 has brought the fault lines in the social organization of labour. Labour is an essential part of social life. India has a long way to go in ensuring safe and healthy work conditions for all categories of labour. The neo-liberal shift in policies and attitude have pushed the workforce towards greater precarity and insecurity. The tragic incidence of reverse migration pointed out how governments have favoured the business class over the large mass of working class population in India. The right of a labourer for a safe, secure and dignified workplace and treatment was seriously undermined by the state and leaving their conditions prone to abuse by the employers. India was not only going through an unemployment crisis prior to the pandemic, but had also put its working classes in substantial risk during the course of the first wave. With the advent of COVID-19, one could see lay-offs, cuts in promotion and other such measures by the employers. Through this study we examined the kind of changes brought about by employers upon their workers as a result of the uncertainty caused by COVID-19. Coimbatore is an industrial city with all kinds of workers: daily wage, factory labour, salaried employees and gig employees. In this study, interview schedule was used to map the changes in the employment conditions of labour in the town during the first wave. A comparative perspective was especially useful in laying bare the difference of conditions, coping mechanisms and experience of precarity in employment across socio-economic classes.

### **Health and Social Protection for Workers: Estimating the Impact of Illness on Earnings in India**

**Sourindra Ghosh**, Consultant, Council for Social Development, Delhi, New Delhi,

Social protection for workers in India has largely been linked with lack of employment opportunity, e.g. the MGNREGS, and less with lack of ability to work. However, disability or illness, temporarily or permanently, reduces the physical ability to work, which is rarely compensated by any social protection scheme for workers in India. Moreover, for the caregivers, not only their own but illness or disability of dependents also become a major burden on their economic activity and livelihood. The problem is further compounded by lack of affordable healthcare where income loss due to illness adds up on high or catastrophic expenditure on healthcare. Lack of proper healthcare further prolongs the duration of inability to work. This paper looks into the impact of illness and/or disability on household earnings in India. The study draws from data of nationally representative household survey.

The state-level variations are analysed in this paper. Socio-economic factors impact the health-work linkage in varied ways. The socio-economically better off sections tend to have better bargaining power or job protection which reduces the adverse impact of ill-health on incomes, compared to the weaker sections. Conversely, the socio-economically weaker sections cannot afford long absences from work and might have lower impact, compared to the better-off, of illness on earnings. The mechanisms of these counter-balancing factors are explored in this paper. Intuitively, different types of workers or workers involved in different sectors could be variably impacted, which is investigated in this paper. The negative impact of illness on income (or, sometimes even loss of employment) compounds the problem of ill-health and deteriorating wellbeing. Income protection or protection from loss of employment is perhaps most needed in times of health crises. Based on the findings, appropriate policy formulations are suggested to offer social protection for workers from job losses or reduction in income during illness.

### **Gendered Safety Nets and Growing Inequality: The Pandemic-induced Recession in India**

**S. Rahul**, Faculty at the School of Management and Labour Studies, Tata Institute of Social Sciences, Mumbai

**Dev Nathan**, Institute for Human Development, New Delhi

In the absence of adequate social security for migrant workers, the recession forced the mass exodus of millions of circular migrants who were then supported by their rural households of largely left-behind women. In addition, the recession rendered destitute small traders and operators of micro-enterprises and reduced the incomes of small farmers. Based on a study of food supply chains, this paper concludes that gendered rural households functioned as safety nets in the severe recession in the Indian economy which highlights the weakness in the state policy and lack of resources in the wake of the Covid-19 pandemic. Overall, the recession did not just result in a temporary loss of income but also increased inequality and strengthened the oligopoly structure of the Indian economy.

## **TECHNICAL SESSION 3.7**

### **Status of Social Security Provisions in Urban Unorganised Labour Market of Uttar Pradesh- A Field Check<sup>5</sup>**

**Nomita P. Kumar**, Assistant Professor, Giri Institute of Development Studies, Lucknow, Uttar Pradesh

**Achala Srivastava**, Senior Research Associate, Giri Institute of Development Studies, Lucknow, Uttar Pradesh

Uttar Pradesh has much higher challenge than the rest of the nation. Unorganised sector is too large in UP. Social security is a concurrent subject. Social protection is perceived to deliver in pursuit of better future to the working force by advancing social justice in promoting decent work. Pandemic has exposed people of all traits to vulnerabilities. Policies needs to change with time hence SS codes needs to change as per needs. In this section, we intend to examine the coverage of protective social security in urban unorganized labour market by different groups of unorganised workers viz; domestic workers, construction workers, tailors and garment workers. We confine our analysis here only to the examination of protective measures prevalent in the labour market i.e. employees' provident fund, gratuity, pension, maternity benefit/ leaves, sickness allowance etc to the wage paid informal workers. Employees' provident fund is one of the largely available social security instruments in India for workers. Studies suggest that nonfarm unorganised sector workers have virtually been left out of social security arrangements, and our study too reiterate these findings - the accompanying tables attests to this fact.

### **An Analysis of Factors Affecting Private Expenditure on Education in India**

**Ananda Mukherjee**, Doctoral Research Scholar, Visva Bharati University, Santiniketan, Kolkata, West Bengal

**Sarbajit Sengupta**, Professor of Economics, Visva Bharati University, Santiniketan, Kolkata, West Bengal

Private expenditure on education is a determining factor for ensuring an individual's educational progress. Though the government provides a vast infrastructure at minimal cost, the individuals have to incur cost from their pockets for various purposes. In this paper we have analyzed the various influences on private expenditure on education based on National Sample Survey 71st round conducted in 2014. We have found that household consumer expenditure, respondent's age, medium of instruction dummy, private coaching dummy and household computer dummy affect private expenditure on education

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5 This paper is a part of larger study sponsored by ICSSR, New Delhi.

positively and household size, rural dummy, female dummy, social group dummies, minority religion dummy and type of school dummy affect private expenditure on education negatively. The important policy implications are:

The tendency to spend less for the female child needs to be amended and the male and female child needs to be given same preference when it comes to expenditure on education. Family planning should be implemented effectively to keep the household size reasonably small for better educational access of an individual. The weaker social groups like STs, SCs and OBCs and the minorities should be supported well by scholarships and stipends for furthering their education. The number of government institutions should increase to provide low-cost education to society. English medium schools should be made to offer more seats for the financially weak. Private coaching should be made as redundant as possible by improving teaching in the schools. For having computer in households, the financially weak should get some subsidy or may be community computer centers can cater to their needs at reduced cost or free of cost.

### **Budgetary Priorities for the Rehabilitation of Bonded Labour in India: An Assessment**

**Jawed Alam Khan**, Centre for Budget & Governance Accountability, New Delhi

The study 'Assessing Budgetary Priorities for the Rehabilitation of Bonded Labour' is a detailed assessment of the government's scheme for rehabilitation of bonded labour in seven states, namely Bihar, Uttar Pradesh, Rajasthan, Madhya Pradesh, Telangana, Karnataka and Tamil Nadu. The study uses both primary and secondary sources of data at the level of Union and select state governments. Among the seven states, Bihar, Rajasthan and Tamil Nadu were selected for field visits and to interact with government officials, in order to understand the challenges in implementing the scheme for bonded labour.

Existence of bonded labour is a major issue in the informal sector of the Indian economy. A sizeable chunk of bonded labour used to work in agriculture and allied sectors. Now, bonded labour is also found in several non-agricultural sectors, due to changes in the nature of industries and occupations over time. They face a number of problems including long working hours, coercion, irregular or no wages, loans or social obligations and restrictions of movement from one employer to the other. About 10 percent of India's workforce falls under the category of bonded labour. Of the total rehabilitated bonded labour, 83 percent belong to Scheduled Castes (SC) or Scheduled Tribes (ST). In 2016, the Ministry of Labour and Employment (MoLE) made a commitment to rehabilitate 1.84 crore bonded labourers by 2030.

Despite provisions in the Constitution related to prohibition of trafficking in human beings and *beggar* (forced or slave labour), and India's ratification of the International Labour Organization's (ILO) Conventions, the Government of India took close to three decades to frame laws on abolition of the bonded labour system (Bonded Labour System (Abolition) Act, 1976). Despite more than 40 years of its existence, an assessment of the implementation of the Bonded Labour Act and Rules revealed

that there had been little impact on the ground in terms of eradicating bonded labour. Further, the conviction of offenders hardly took place due to operational difficulties and delays in judicial processes carried out by District Magistrates (DMs). The rehabilitation process is slowed down, due to lack of offenders being convicted and other factors like weak implementation and monitoring.

The paper found that the Bonded Labour Act and Rules do not provide clear directions to the government for initiating new schemes or towards ensuring allocation of budgets for rehabilitation of bonded labour. It largely focuses on convergence of ongoing programmes for providing benefits in the form of land, inputs for agriculture, training in handicrafts and allied occupations, loans at differential rates of interest, or employment in urban or non-urban areas. There is no comprehensive national level policy for effective rehabilitation of bonded labour. During the Plan era, the Planning Commission was an important institution to help the MoLE in designing programmes and resource allocation through Five Year Plan processes. More recently, however, NITI Aayog's Action Agenda and its Strategy Document have not made any reference to eradication of bonded labour in the context of Sustainable Development Goals (SDGs). However, the MoLE has developed a 15-year plan called Vision 2030, a seven-year strategy and a three-year action agenda for rehabilitation of bonded labour, which was presented in Parliament.

The new Central Sector (CS) scheme for Rehabilitation of Bonded Labour, 2016 is the only programmatic intervention at the national level to replace the Centrally Sponsored Scheme (CSS) for rehabilitation of bonded labour initiated in 1978. At the state level, only the Karnataka government initiated a state-specific scheme for rehabilitation in 2006. Under the older scheme, financial assistance for rehabilitation of bonded labour was fixed at INR 20,000 per beneficiary. Under the new scheme, this increased to INR 1 lakh per adult male beneficiary, to INR 2 lakh for children, orphans, forced child labourers and INR 3 lakh for women or children rescued from sexual exploitation. However, linking clauses of conviction of offenders with the actual provision of cash assistance is a serious design and procedural problem in the new scheme guidelines.

The paper suggests that the issues of bonded labour should be included in the new policy documents of the Union and state governments such as the vision and strategy documents and action agendas. The clause linking conviction of offenders with full payment of cash assistance to released bonded labourers should be done away with from the Central scheme guidelines. Full cash payment and other rehabilitation support must be provided to bonded labourers, following the preparation of release certificate and registration of First Information Report (FIR) against offenders. There is a lack of transparency of data, the budget allocation and utilisation under the bonded labour scheme has not been presented separately from National Child Labour Project (NCLP) in the Union budget. The Union government should create a management information system, along the lines of the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) and Swachh Bharat Mission (SBM) for recording the physical and financial progress of the bonded labour scheme. Corpus funds should be increased from the existing INR 10 lakh to INR 20 lakh, per district. Further, the amount of corpus funds should not be uniform across all districts.

## **How does India's New Labour Code affect the Labour Market? - An Insightful Analysis**

**Sohini Banerjee**, Associate Professor, Indian Institute of Social Welfare and Business Management (IISWBM), Kolkata, West Bengal

Labour and employment regulations have far-reaching implications for every business organization. The for new labour code i.e. Occupational Safety, Health and Working Conditions Code 2020, the Industrial Relations Code 2020, the Code on Social Security 2020, the Code on Wages 2019 set to simplify, modernize and restructure the current regime and increase ease of doing business in India. All the labour codes have been aimed at broadening the scope of coverage, rights and protections, reducing multiplicity in definitions, authorities and compliances, and embracing more digitalization in registrations/compliances. But those codes have not been implemented so far despite the warm welcome it received from sections of the working class, legal fraternity as well as from employees. What are the socio-legal compulsions that are a roadblock to the Codes? The objectives of the four labour Codes are to provide social insurance for employees by protection and preservation of the health, safety and welfare of workers, maintenance of good relations between employers and employees. How to protect the four key objectives of the Codes in future, viz social justice, social equity, national economy and international uniformity? The consolidation of the 44 Labour laws is indeed a laudable exercise.

The present paper seeks to search some new mechanisms by which these reforms could be now benefiting the public. The paper will also analyse the gaps identified during demonetization, GST rollout and the lockdown during the Covid-19 pandemic. How could similar problems be eliminated now so that the Four Labour Codes could finally transition from the ink of the statute book to reality? At the cusp of this paper are suggested models for sensitization, legislative and social impact towards the goals specified above. This paper will also focus on case studies like Bangladesh and China these countries have immensely benefitted their labour forces by introducing Labour Codes. Clearly, Labour Codes are the way forward

## **Impact Assessment of MGNREGA on Income Generation and Consumption Expenditure in Himachal Pradesh**

**Sonali Katoch**, Research Scholar, Department of Agricultural Economics, Institute of Agricultural Sciences, Banaras University, Varanasi, Uttar Pradesh

**Rakesh Singh**, Professor & Head, Department of Agricultural Economics, Institute of Agricultural Sciences, Banaras Hindu University, Varanasi, Uttar Pradesh

**Madhu Chhanda Kishan**, Asst. Prof. (Agril. Statistics), College of Agriculture, OUAT, Bhanwanipatna, Odisha

MGNREGA was set in motion to enhance livelihood security in rural areas by providing at least 100 days of guaranteed wage employment in a financial year, to every rural household whose adult members volunteer to do unskilled manual work. The objective of the study is to assess the impact of

MGNREGA on income generation and consumption expenditure of selected households. Multi-stage random sampling is used to draw the 100 households of Sangrah and Rajgarh blocks of Sirmaur district in Himachal Pradesh. Simple tabular analysis, paired t-test, multiple linear regression, and marginal propensity to consume are used for the analysis. Results reveal that the scheme has significantly impacted the income generation and consumption expenditure of the households. There is a significant hike in the agriculture and livestock income, whereas, from other sectors like labour and business, income has declined after the enactment of the scheme. It is observed that an increase in non-food consumption is more than the food consumption, meaning when the income of beneficiaries rises the proportion of income spent on food falls, even the absolute expenditure rises. Marginal propensity to consume is found 0.66 i.e. with an increase in a unit of disposable income, a household is spending approximately 66 percent. For an overall income leap, assets creation should become one of the prime concerns rather than prioritizing the direct ways to increase the income of beneficiaries.

### **Challenges before the Informal Workers: Special Reference to Sugarcane Cutters in Ahmednagar District of Maharashtra**

**Madhav Shinde**, Associate Professor, BPHE Society's Ahmednagar College, Ahmednagar, Maharashtra

Sugarcane is a one of the many commercial crops. It is an important source of income for sugarcane growers, labourers, transporters and for sugar factories also. Sugar factories produce multiple products from sugarcane apart from sugar. These include ethanol, bagasse and many other bi-products. As sugarcane crop is crucial to bring prosperity among growers and sugar factory owner's life, it is also crucial to generate employment and income for agriculture workers, sugarcane cutters, transporters and many others. The crop involves various labour activities at different stages from pre-crop cultivation to cutting the sugarcane and transporting it to the factories. All of the labour activities are unorganized in nature. Sugarcane cutters play important role from the point of both sugarcane farming and sugar factories. These workers are also known as seasonal workers as they work during a sugarcane season. The workers mostly migrate from their natives to the areas of the sugarcane crop. All the work from sugarcane cutting to loading it into the trucks, tractors and transport it to the sugar factory is not a time bound process. Though sugarcane cutting is done in day time, the loading and transportation of sugarcane has no proper time as there is no fix schedule for unloading of the trucks or tractors in the factories. These empty vehicles go for next loading to the farm and workers have load with the sugarcane. These workers work in adverse conditions and also live in adverse conditions. They live in temporary huts made with straws or low-quality plastic clothes without proper bathroom and sanitary facilities. Their huts are mostly temporary as they have to move from one place to another continuously. The workers do not get proper drinking facilities and kitchen fuel and other basic facilities. Considering the nature of work of these workers, understanding the socio-economic status and quality of life of these workers are important. The present paper attempts to throw light on the socio-economic and living conditions of sugarcane cutting workers in Ahmednagar District in Maharashtra. Basically, Maharashtra is second largest producer of sugarcane in India after Uttar Pradesh. Ahmednagar is one

of the prominent districts in sugarcane production in Maharashtra. The first cooperative sugar factory not only in the country but in Asia was set up in Ahmednagar. Therefore, the district has long history of sugarcane production and sugar production.

Maharashtra accounts about 20 percent of the sugar production in India. In the year 2019-20 there were around 143 sugar factories in operation in the state. Ahmednagar district reports 32 total sugar factories of which 16 are in operation currently. According to the 2017-18 report Ahmednagar district had about 14.08 percent share in total sugar production in the state. Sugarcane crushing season ranges between October and May. During this season sugar factories hire thousands of workers and undertake sugarcane cutting work manually and sometime through harvesters. Therefore, many of the sugarcane cutters migrate in Ahmednagar during the season from neighbouring districts. Eventually, Beed district in Maharashtra is known for the home of sugarcane cutters. Beed district sends thousands of sugarcane cutters in many districts of the state. However, recently the workers from many of the other district have also started sugarcane cutting work. Sugarcane cutting work is not easy as compared to other agriculture works. The workers have to tackle with many day-to-day difficulties in the job. Living, health, educational conditions are considerably poor. Apart from this there is a big technological threat to the sugarcane cutters as the sugar factories tend to hire harvesters for sugarcane cutting instead of the workers where harvesters grab work opportunities of many of these workers.

The present study is based on primary data collected from the sugarcane cutters in Ahmednagar district in Maharashtra. About 120 workers from various sugar factories in the district are selected randomly for the interview. The study aims to know living, health and educational, economic and social status of sugarcane cutters and also attempts to review the role of social security programs for the workers in the district.

### **Ayushman Bharat Scheme: A Critical Perspective**

**Balwinder kaur**, Assistant Professor, Hidayatullah National Law University, Raipur, Chhattisgarh

**Harsimran Kaur**, Student, Hidayatullah National Law University, Raipur, Chhattisgarh

This paper aims to provide a critical analysis of health rights/entitlements provided by the scheme Ayushman Bharat along with its loopholes, remedies for prevention of its misuse, and better implementation along with its present-day application. Further, it makes an attempt to understand whether the AB-PMJAY scheme has been a success in achieving its purpose of providing Universal Health Coverage and the ways to strengthen such social insurance and health entitlement for a larger benefit. The research is based on secondary sources. Under the Ayushmann Bharat scheme 1,393 procedure are free of cost in any empanelled private and public hospitals. The scheme directs the insurance agencies to pay the estimated amount to the hospital based on the health services delivered. The high-performing hospitals get incentivized under the scheme. Approximately 150,000 health and wellness centers to offer comprehensive universal health care shall be created under this scheme. The centres are created to provide secondary and tertiary care to poor families. This paper, however, provides a critical analysis of the second component i.e., Pradhan Mantri Jan Arogya Yojna along with

the social security it provides and aims to understand and analyze the challenges to its application regarding the policy of the Universal Health Coverage in India further providing for the remedies. The paper also establishes a relation between the scheme and the intended beneficiaries by further examining its effectiveness in the present COVID-19 era.

### **Covid-19 and Informal Workers: Findings from Delhi Beggars Survey**

**Anisha Yadav**, Research Scholar, Ambedkar University, Delhi

Covid-19 pandemic has impacted almost all sections of the population. The lockdown has positively resulted in lowering down the cases but the economy was negatively affected. As per the estimations from International Labour Organisation (ILO) in April 2020, about 2.5 Crore jobs could be lost worldwide due to the pandemic. It has also been observed that more than 40 Crore informal and low paid workers in India might have been pushed to deeper poverty. A study conducted by the Azim Premji University revealed that the 1st wave of COVID 19 pandemic pushed 23 Crore people below the poverty line. The report also revealed that there has been a rise of 15% in poverty in rural India and a rise of 20% in urban India during the last pandemic year.

In Delhi, as per the survey conducted in 2021 by Social Welfare Department of Delhi Government and Institute for Human Development, there are about 20,719 beggars in Delhi, out of which about 50% of the beggars started begging from last 5 years (new entrants), 40% were old timers and 10% were begging since birth. 60% of the beggars were adults in the age group of 18-59 years, followed by 24% children/adolescents in the age group of 0-17 years and 16% old 60+ years of age. The major factors forcing them into begging are unemployment, illiteracy and poverty. The study found that the impoverished and the lower middle class has been worse hit by the pandemic. Covid 19 was one of the reasons due to which people lost their jobs and many were compelled to beg specially in case of wage earners. People earning on daily basis for their bread and butter were worst effected along with people who were wiped off from their respective offices/workplace. It was found that a significant number of beggars were temporary unemployed or part timers and casual workers. Women worker in the informal sector were worse hit. People involved in domestic work/maids, temporary workers in the hotels/restraunts, drivers and security guards etc were severely affected. Most of them belonged to informal sector. The informal sector is one of the large contributors of employment opportunities for those who lack education or skill for the formal sector. These workers are dominant in number but unfortunately they do not get any protection and benefits which increase their economic vulnerabilities in securing a source of income and employment.

## **The Impact of MGNREGA in boosting Agricultural Households' Income: Evidence from Situation Assessment Survey (SAS), 2018-19**

**Ranjana Roy**, Fellow, ICRIER, Delhi

The paper attempts to address the impact of the MGNREGA on the farming households, who are mainly comprised of small and marginal farmers. As per SAS, an average Indian farmer has four major sources of incomes i) income from cultivation ii) income from farming of animals iii) wages and salaries iv) income from non-farm work. Temporal income analysis reveals that share of income from wages and salaries has increased and currently constitute 40% of the total income. The contribution of wage income is higher for marginal (52%) and small farmers (32%) operating less than two hectares of land compared to the larger farmers. With shrinking landholding size, stagnating crop productivity, lack of storage facilities, and insufficient markets, farmers are confronted with highly volatile prices resulting in abysmally low level of income from crop cultivation. As income from crop cultivation in a meager piece of land is not enough to maintain a healthy and respectable life, they are seen to diversify their source of income to backyard poultry, work as labourers on farms of bigger landholdings and so on.

In this background, the paper tests the statistical hypothesis that the contribution of wage income is significantly high for farming households across landholding classes against the alternative. The paper then examines the effectiveness of MGNREGA scheme in enabling farmers to receive a better income as part of the wage income. This study draws out regional disparity in the functioning of the scheme and benefit received by farmers across landholding classes. The paper also studies the impact of the scheme in augmenting farmers' income taking into account the structural factors which could also affect farmers' income. The study has made some suggestions for improvements in the scheme to empower farmers to take more risks in terms of commercialization and diversification in the farming operation.



**TECHNICAL SESSION  
(BRIEF PRESENTATIONS-1)**



## **Reflection on Migrant Labour Force on the Path toward Achieving Sustainable Development**

**Riya Pathak**, Project Officer, Gujarat CSR Authority, Gandhinagar, Gujarat

Today humanity is going through one of the most radical turning points in demographic history and further, the covid-19 pandemic has brought unprecedented challenges, especially for the people living and working in the urbanized areas. As per the census 2011, India's 31.16% population lives in urban areas. The economy is now shifting towards urbanization; the urban population contributes about 63% to the Indian GDP at present and this share will further increase. Demographic explosion and poverty-induced rural-urban migration are the consequences of the growing urbanization for India. As per the National Sample Survey Organization (NSSO), about 30 million workers are constantly on the move which indicates the rate of migration in India. In 2015, the United Nations launched 17 Sustainable Development Goals with the target of accomplishing them by 2030. Our country is also moving ahead in this direction and the government has launched a number of policies for the development of a nation and the betterment of its people. However, if we minutely look into the details and analyze the impact these schemes have created on the poor's lives then we realize that still in many parts of India, migrant workers do not have access to adequate sanitation and portable facility, faced problems in getting ration and using chulas for cooking. Urbanization drives economic growth and migrant workers even though being an integral part of this process; deprives adequate social and economic conditions. Pandemic has become an eye-opener for us to look into the issues which migrant labour force is facing. All these SDGs are deeply interconnected in nature and therefore it is required to focus on all the goals equally as lack of progress of one goal has a direct impact on the other goals, therefore, it is necessary to equally integrate all the sections of society for achieving three pillars of sustainable development - social, environmental and economic sustainability; especially integration of population coming to the towns for livelihood opportunities into the urban planning is of utmost importance to achieve urban sustainability. Looking to the plight of migrant workers during the covid-19 pandemic, Niti Aayog has formulated a new draft of migration policy by considering the condition of migrants during the time of pandemic as a humanitarian and economic crisis. This policy covers all the nerves points of issues that inter-state migrant workers are facing and will surely play a crucial role in bringing up the sustainability if executed timely and proficiently across the nation.

### **Wage Differential as a Cause of Rural Urban Migration in India**

**Devasish Hazrika**, Doctoral Fellow, Department of Economics, Mahatma Gandhi Central University, Motihari, Bihar

**Manoj Kumar Chaudhary**, Doctoral Fellow, Department of Political Science, Mahatma Gandhi Central University, Motihari, Bihar

This research paper is about to highlight the issue of wage difference as a base of rural-urban relocation in India. Although many scholars and researcher have explained different reasons of migration such as lack of education, lack of basic needs or shelter etc. After all that, the main reason most to be

discussed in the literature of India is the wage difference. Harris and Todaro(1970) shed light on the wage differential as a major issue of migration between the rural and urban population. The basic aim of this paper is to analyze consequence of migration in an empirical context. In this paper, the technique of OLS regression has been applied using the rural migrants as a main variable. The results of this study show that according to the Harris-Todaro model, there is a huge difference in the expected wage of urban, industrial sector and real wage of agricultural sector in rural areas.

### **Impact of Covid-19 on Migration and Reverse Migration: Micro Level Study in Uttar Pradesh**

**Srinivasu Bathula**, Associate Professor, Jamia Millia Islamia, New Delhi

**Isha Sharma**, Research Scholar, Jamia Millia Islamia, New Delhi

Developed and developing countries are being impartially affected by the COVID-19 pandemic. In a nutshell, it can be viewed as a 'big blow' to all the economies. The IMF has announced this epidemic as "Worst Economic Downturn since the Great Depression". The pandemic, corona virus (COVID-19) is the greatest challenge and the whole world is facing in 2020 after the World-War II even. Nationwide lockdown due to COVID-19 resulted in all the industries operations coming to a standstill. This has led to production shutdown and job losses in the economy. Since in India it is the informal sector which provides employment to 92 percent of the workforce, the worst hit due to lockdown was the informal sector workers. Not just the informal economy, the formal economy also could not escape from the clutches of the pandemic, COVID-19. In this pandemic, the worst hit section is migrant labour.

### **Reverse Migration of Labourers in the Construction Sector amidst COVID-19 Lockdown – A Case Study at District Level**

**Kalyan Das**, Associate Professor, A.C. College of Commerce, Jalpaiguri, West Bengal

The contagious COVID-19 induced lockdown has resulted hazards and policy challenges relating to both health and macroeconomics. The role of migration is instrumental for the provision of labourers everywhere to diversify the labour market with better wage and the changing skill requirements. As per Census Reports, the predominant character of Indian population is internal migrants. Of which, vast proportion of workers are employed in the non-agricultural unorganized sector including manufacturing, construction, wholesale and retail trade, transportation and storage. And the construction sector is very labour – intensive (absorptive) sector, which is structurally underdeveloped, unbalanced; and, factor market has no substitute and operationally less choice of technique based. With the increasing reverse migration of workforce returning to native places amidst pandemic times has created socio-economic and health emergency for migrant-receiving ends. The large inflow of workforce consequent to the unprecedented pandemic has created the nature and composition of the local labour market more vulnerable considering wage rates structure, employment opportunities and living conditions.

West Bengal is known as a major source of supply of unskilled labourers compared to the other

states in India, in which, the district, Malda is one of the labour abundant districts supplying workers in construction sector. The district is known for its cultural and historical legacy, diversified livelihood patterns, demographic characters and ecology induced vulnerabilities. Its labour market is basically characterized by a combination of immigrants, out-migrants, in-migrant and local workers. The recent experiences of upsurge of reverse migration necessitates to undertake a detailed micro level case study on the emerged migration-employment-wage rate scenario in the unskilled local labour market, which remains an important area of research in the development discourse to understand the problems of a labour abundant economy like India. There are dearth of district-specific studies and official data sources in this area. The present study intends to bridge this critical research gap. This paper attempts to examine the overall and differential impacts in the area of intersection of pandemic, poverty incidences, migration, unemployment, wage differentials, and inter-temporal disparity of economic well-being in terms of policy prescriptions in the informal sector estimating characteristics effects, coefficients effects and elasticities in terms of candidate and policy variables.

There has been a large body of literatures linking informal sector and incidence of poverty to various socio-economic explanatory variables with reference to India in the context of migration. However, there have so far been very few studies on the impact of pandemic induced lockdown on factors pertaining to reverse out-migrants and local non-migrant labourers. To bridge this critical gap, this study intends to undertake a micro-level case study in this perspective. It uses both primary and secondary data. For data analysis, descriptive statistics, factor analysis, dummy variable introduced multiple regression, principal factor component regression analysis, data envelope analysis (DEA), non-parametric tests for comparing samples besides logit/probit models application may be useful. The major themes of the current research are on the trade-offs between pandemic induced lockdown and its economic fallouts, labour market, wellbeing, poverty, inequality, unemployment of the socially and economically marginalised informal sector to improve governance and development. This research has been to provide enormous significant information on the impact of such large scale migration on the well-being of workers in particular and on rural poverty in general both at the micro and macro level in pandemic time to explore appropriate policy analysis to get an envisaged roadmap of planned rural development and inclusive growth.

### **Nature of Labour Out-migration and Employment: A Study of North Eastern Migrants in Delhi**

**Gaidimlung K Jacob**, Ph.D. Student, Jawaharlal Nehru University, New Delhi

The traditional discourse on migration and development (Lewis theory) vitalize the mobility of rural surplus labour to urban areas for employment likewise, neo-liberal regime encourages migration with the belief that migration reduces poverty in less developed region. At the same time, the current neo-liberal economic development regime has widened the developmental gap between rural and urban areas. Moreover, the development in infrastructure of transportation and communication has brought down the cost of migration tremendously in recent years. In addition to this, North East Region is

located in the periphery and the scale of economy of this region is relatively small and job market exist mostly in government sector and the private sector is close to non-existence. Consequently, the government sector alone could not generate enough employment for the growing educated youths. Therefore, available evidences suggest that out-migration has been increasing rapidly from North-East Region (NER) to other parts of India. The lack of employment avenues is one of the main causes of huge out-migration in the region particularly youths.

This present paper examines the nature of labour out-migration and employment status of migrants from NER in Delhi and reports the findings of the field survey, where extensive interviews were conducted using semi-structured and open-ended questions from 199 respondents who are migrants from NER working in Delhi. The data obtained from the field survey is interpreted and analysed using statistical tools and Ordinary Least Square (OLS) method. On examining the labour out-migration of NER it was found that the growth rate of out-migration has increased for most of the Northeast states over the periods of 1991-01 to 2001-11 (census report 1991, 2001, 2011). Among NER migrants, unmarried migrants are much more than the married migrants and more specifically, the percentage of Hindu married migrants are more than their unmarried migrant's counterpart (field survey data, 2021). Also, urban migrants are much more than rural migrants for all North-eastern states except for the state of Manipur, Tripura and Arunachal Pradesh. The two states Tripura and Arunachal Pradesh has higher percentage of migrants with post-graduate and above level of education compared to other Northeast states and the percentage of migrants with graduate degree are more for the Northeast states of Manipur, Nagaland, Meghalaya, and Sikkim compared to other Northeast state. Among the migrants who have migratory background, the three states of Tripura, Manipur and Mizoram have the highest percentage of migrants who had migrated before moving to Delhi while, the states of Sikkim, Nagaland, Meghalaya have less proportion of migrants who had migrated before moving to Delhi. Female migrants moving for economic reasons are more compared to male migrants, moreover, migration for economic reason is increasing while migration for education is declining over the periods of time. Majority of migrants have undergone skill training and the states of Mizoram, Manipur, Meghalaya, has high rate of employable skill migrants compared to other Northeast states (field survey data, 2021).

This paper reveals that about 81 percent of migrants from NER in Delhi is private sector employees and just about 18 percent of them in public sector employment. In addition, the percentage of migrants employed in public sector is higher for migrants with higher level of education. Female migrants are seen largely employed in hospitality jobs such as staff nurse, airlines, receptionist at restaurant/hotel and in salon. In contrast, majority of male are employed in BPO and other regular salaried jobs (professor, police, lawyer and staff in Banks) (Jacob, 2019; Remesh, 2012). Among the reason for taking up their present employment, migrants taking up the jobs because of family pressure, financial needs and lack of suitable jobs shows the highest percentage and about 18 percent of the migrants take up their jobs because of the growth prospect and their career. More specifically, the states of Manipur, Arunachal Pradesh and Assam has higher percentage of migrants taking up jobs because of the family pressure and financial needs, followed by Tripura and Nagaland. The incomes of the migrants are

found positively related to the level of education and age. Moreover, unmarried migrants earn less monthly income by 24 percent than married migrants. Migrants from the states of Nagaland, Mizoram, Meghalaya and Assam earns better monthly income compared to Manipuri migrants. Also, migrants in public sector earn more monthly income than private sector employees. Migrants who have changed their job earn more monthly income (field survey data, 2021).

Further, this paper finds that only about 4 percent of the respondents chose their current job because it is their profession (matches their skills and levels of education) while, 96 percent of the migrants join their job because of financial needs, lack of suitable jobs and so on. Moreover, migrants with graduate and post-graduate degree are working in the same type of job with migrants having only higher secondary level of education (field survey, 2021). Therefore, the findings indicated towards the mismatch of the levels of education and the kind of employment migrants engage in urban cities. It also reveals that many migrants are in precarious employment engaged in informal sector without social security benefits. Therefore, this paper argues that at the policy level there is an urgent need to address the grievances out-migrants to bring them under the social safety net. This paper further argues that it requires a policy to bridge the gaps of migrant skills and job market requirements by giving vocational course along with their formal education to prepared them to participate effectively in the fast-growing economy and consequently, to uplift the welfare of these migrants.

### **Remote Work in the Post Pandemic World: Conditions of IT Sector Workers Based in Guwahati**

**Sayam Siddha**, Research Associate, Centre for Budget and Governance Accountability, Guwahati, Assam

The outbreak of the COVID-19 pandemic has been an unprecedented shock to societies and economies across the world. As lockdown measures entered force to curb the spread of the virus, work was shifted to home wherever possible. Although initially designed to maintain social distancing, it is argued that this shift might have a long-term impact on the ways work is organized.

In this paper we try to understand the conditions of IT sector worker who have already made this shift to remote working following the pandemic. The first section of this paper tries to understand the developments of the past decades which lead to the international division of labour (IDL) particularly in the age of the Internet. The second section looks at the IT sector in India in the context of IDL and its response to the pandemic. The third section tries to understand the concept of remote work in particular. The fourth section of the paper is dedicated to the primary research that was conducted among IT sector workers who are currently based in Guwahati and working remotely. This section elaborates on the conditions of work with regards to working hours and control over work. It further tries to understand the ways the transition to working from home impacted the life of workers with regards Work Life Balance.

As part of methodology, an online survey was conducted among IT workers currently engaged in remote work and based in Guwahati. Although the respondents were based in Guwahati, they worked

for companies which are engaged in outsourcing from the various metro cities across India. The survey asked both open ended and close ended questions related to the matter. The Sample Size of this study is 58. The information shared by respondents is analyzed thematically to describe the various underlying trends. Ethical concerns related to confidentiality is maintained during the study.

Based on the survey, it can be inferred that although there is greater flexibility among remote workers on how to manage their time, at the end of the day the set targets have to be met. Therefore, despite the flexibility, remote work can lead to irregular work schedules, longer hours and more intensity of work. Thus, such trends are embedded in the neoliberal interests which demands greater flexibility itself to have labour perform whenever and wherever capital demands. While those working remotely have advantages such as the absence of daily travel, several employers expect that time saved to be compensated for in the time spent working. There is greater expectation from employees to be available at shorter notices and deliver faster, even at odd hours. These expectations lead to the most significant issues of remote working- the blurring lines between time for work and time away from work. The Work-Life Balance which is difficult to ensure otherwise is faced with greater challenges while working from home as there are both interruptions while working (chores, care responsibilities, etc) and interruptions when away from work as well (work related calls, mails and expectations to complete assignments at odd hours).

As there is a greater interest in experimenting with the remote organization of work, the shift which was meant to be temporary is being increasingly designed to be more sophisticated. Such developments can be understood not only from the interest of the employers but also through the interest towards formalization of such a system of remote work by the government. In this regard, we see that Labour unions have already asserted their opposition to the proposed WFH provision which they are afraid would lead to distortion of the labour markets and allow employers to reduce salaries. As workers continue to grow alienated from their work and are increasingly isolated from their co-workers, the impact of remote work can only become more complicated with further ease to employers. In the way forward, as it is less likely for the IT sector to get back to complete normalcy any time soon, it is important to ensure that the issues of the employees related to working hours, work-life balance, are addressed urgently.

### **A Study on Consequence and Impact of Lockdown on Migrant Labours in India**

**Rachana Patil**, Associate Professor, Rural Management, Welingkar Institute of Management  
Development & Research, Mumbai, Maharashtra

The economy of any country depends upon the availability of the factors of production. Labour is the most important factor of production in the production process. Migrant labourers' are the big chunk of the workforce, which migrates from one state to another is called interstate migration.

It plays a vital role in boost-up the economy of the state and eventually of the country. The government of India announced the lockdown on March 25th, 2020, this category of labourers' got impacted critically in that stint.

The study was conducted during lockdown 2020 with objectives to understand the need for interstate migration, challenges faced by them in lockdown, and its impact on migrants. Primary and secondary data were collected by Focus group discussion (FGD), a well-designed questionnaire, Pre and post-lockdown. The convenience sampling method was adopted to collect the data of 90 migrant labourers' belonging to carpentry and construction occupation from the Mumbai region as Mumbai is the home of maximum migrants from Up and Bihar as per the census data. Qualitative and quantitative data were analysed by Content analysis and tabular analysis. The need for employment was the most prominent cause of migration. They had faced a lot of challenges in the first lockdown, like Psychological, Economical, and social, protuberant Social exclusion faced by migrant labourers' was commonly observed in the lockdown days. The impact of the first lockdown was so protruding that they do not want the exodus to other states and eventually it has an impact on the overall economy. The overall observation was though, government schemes are there to support the migrant labour market but those labourers' are not aware of those schemes and the available benefit to them. There is a need to form and promote policies at the state and central level to encourage labour migration like employment exchange cards and treat them with respect and overcome social exclusion and reduce the vulnerability among them.

### **Socio-economic Hurdles for Migrated Labours in Pandemic Hit Kolkata: A Case Study**

**Raunak Chatterjee**, Student, Charuchandra College, Kolkata, West Bengal

**Tusar Debnath**, Student, Charuchandra College, Kolkata, West Bengal

**Arpita Ghosh**, Student, Charuchandra College, Kolkata, West Bengal

Migration is the movement of people to a new area or country in order to find work or better living conditions it offers livelihood to migrated workers and their families which contribute socio-economic growth across country. In India, as per census 2001 about 307 million people have been reported as migration by place of birth. Out of them about 259 million (84.2%) migrated from one part of the state to another. Bengal has a 9crore population as per census 2011, 2.22 lakh people had migrated to Bengal from other states for work and employment. India announced lockdown on 25<sup>th</sup> March, 2020 to curb the spread of COVID-19 throughout the country. Everything went for a shutdown and the people engaged in informal sector were severely affected being homeless, jobless stranded and on some occasion starved to death. This paper aim to find the dependency of some factors that may have an effect on migration among the in-migrants of Kolkata, West Bengal engaged in informal sector. We also try to present a picture how were these migrants affected during this pandemic and what are their perspectives regarding future.

We have collected primary data for this study. Data regarding the study were collected through a survey based on purposive sampling technique. 71 respondents answered to our semi-structured questionnaire. Questions were divided into personal details, health, food, financial conditions. The survey only focused on in-migrants from other states and other districts from West Bengal engaged in

informal sector in Kolkata, West Bengal. The data was collected from some specific parts of Kolkata and was conducted between 23/12/2021 and 30/12/2021. We have created an econometric model which represents the relation between migration and the personal details of the respondents. Graphs and plots have been presented to present a picture of what we found during the survey. We have used STATA12, R, RSTUDIO.

For the model, we first labelled the data, then went on to represent the summary statistics. Then we went on to regression on the dependent variable 'migration' with other independent variables. We were able to find out that we had a significant model with R-squared value of 0.64. We also found a trace of heteroskedasticity which was dealt with the regression with ROBUST command. We received a similar significant model with 'income', 'asset', 'education', 'reason' being significant variables. The value of R-squared this time was also 0.6439.

Through our data analysis we found that most of the in-migrants were from other states precisely 68%. Mainly they are male and follow Hindu religion. Around 57.75% respondents have received secondary level education. 53.52% says the reason they decided to migrate is because there was no job in their home town. Out of the 71 respondents 22 of them didn't have a bank account mostly belonging to the low-income group. Due to poor management of distribution, 46% claims that they didn't receive ration. 92% of them are vaccinated out of them 90.8% have received both the doses. Reverse migration was a very big problem during the initial phase of lockdown. 25% of respondents have confirmed they faced problem during reverse migration. 54% of in-migrants were unemployed for almost 5 months due to lockdown. 20% also stated they had to change their work as they were unable to support their family. 82% of respondents believe that situation has worsen since the COVID-19 and lockdown. It was also found that 50.7% of people don't think situations will improve in the future and just 23% of the respondents are optimistic.

Firstly, in the model we have noticed in the model which we have created is that our dependent variable which is migration has a relationship with the independent variables. We have found out that some of the variables were significant. The values of them do affect the migration. Most in-migrants in Kolkata are from Bihar, Jharkhand. Those not having a bank account were deprived from government supports. They were also deprived from getting rations due to poor distribution system. However, most of them were vaccinated. Though most of them didn't use a mask, maintain social distance and had poor sanitizing practices which can be due to lack of education of poor economic condition. Reverse migration was a big problem for migrants as many of them lost their job and were unable to sustain themselves in city where they work. Government support like shramik special trains etc helped migrants to return to their home safely. Many migrants had to change their work as they were unable to support their family. Poor living conditions and shortage of basic necessities have caused severe mental and psychological stress to migrants leading to domestic violence, substance abuse, illness, depression. The worst part is most of these migrants believe that situations will not improve in future and can turn to worse. This also represents how the pandemic has affected their lives. Even being optimistic is an irrelevant thought for them which basically sums up the whole story.

We are able to find a relationship of the migration with other personal components through our model. We have a pretty significant model and a decent fit. We found that these in-migrants were very much affected during this pandemic. Being engaged in the unorganized informal sector, lost their job, didn't received supports, faced problems in reverse migration. Most of them are vaccinated but do not maintain social distancing, do not wear a mask, sanitizing practices are also negligible. These people should be educated regarding this hygiene practices by the government or NGOs. Government and other authorities should work at the root level so that they can understand the problems of these in-migrants in Kolkata and take measures to eradicate them.

### **Economic impacts of Globalization on Agriculture of Haryana**

**Virender Singh**, Assistant Professor,(Ag. Economics), College of Agriculture, Nagaur, Rajasthan  
**Vikash Pawariya and Balkrishan**, Assistant Professor, Chaudhary Devi Lal University, Sirsa,  
Haryana

The agricultural sector is known to be the backbone of Haryana economy with an employment of majority of the population in various agricultural, horticultural and allied activities. Its contribution to the state gross domestic product however has been declining steadily over-past decades due to globalization. With a view to move towards liberalizing the agriculture sector, India as a member nation of WTO signed the first multilateral agreement on agriculture and set off the process of reforms in the agriculture sector in terms of tariff reduction, export subsidies, domestic support subsidies, etc. In this context, this paper tries to analyze the economic impacts of globalization. This study is based on primary as well as secondary data base. The present paper finds out positive impacts of globalization on income of the farmers, area, production and productivity of various crops and crop diversification. But it has also accelerated the crisis in agriculture in term of debt-trap, farmer's suicide, etc. The paper also suggests some concrete steps needed to be taken by the policy makers to insure the improvements in the agricultural sector.

### **Female Labour Force Participation: A Comparative Study of SAARC and SADC Countries**

**Uma Karmwar**, Senior Assistant Professor, Lakshmbai College, University of Delhi, Delhi

In the 21<sup>st</sup> century globalised world each country is striving to grow be it high, upper-middle, lower-middle or a low-income country. To achieve a high economic growth, efficient use of factors of production is must. The regional groups; SAARC and SADC have a mix of both lower middle-income economies and upper middle-income economies. The abundance of labour resources and natural resources distinguishes these from all other regional groups. These regional groups face structural dualism, institutional dualism, and wage dualism as the greatest challenge. Male and female labour force participation is important for a faster growth of any economy. The economies of both the regional groups show variation in female labour force participation. The purpose of this study is to examine

the female labour force participation in SAARC and SADC countries. It tries to analyse the impact of access to clean fuels and technologies for cooking and access to electricity on female labour force participation in SAARC and SADC countries.

The study tries to co-relate the factors and tries to look at the trend of all three; female labour force participation rate, since 2000 to 2019. Access to affordable, reliable, sustainable and modern energy, and increase in women empowerment and participation in decision-making/politics are core to the attainment of Sustainable Development Goals (SDGs) of the United Nations (UN). It highlights the importance of clean energy based infrastructural development for the participation of female in the labour force and prosperity of these two regional groups. This study separately estimates the effects of access to clean fuels and technologies for cooking and access to electricity on FLFPR of low-, lower-middle-, and upper-middle-income member countries of the SAARC and SADC. The findings derived from this study are expected to help the two regional blocs and other similar developing countries worldwide, to partially attain the clean energy transition targets mentioned under the 2030 Agenda for Sustainable Development Goals. The move towards clean energy transition will not only improve the health of female but will also save their time as well to participate in the labour force if they are willing to do so. The recommendations made in the paper will be valuable for policy makers to understand the role of female in nation-building and will push the Government's attention towards strengthening the existing policies and formulating new policies.

South Asian Association for Regional Cooperation (SAARC) and Southern African Development Community (SADC) are the two regional groups selected for the present study. All the Eight-member nation of SAARC, and out of fifteen-member nation SADC, nine nations are selected for this research. These regional groups represent a mix of World Bank classification of countries based on income levels. The study is based on qualitative, analytical, descriptive and comparative study of female labour force participation from 2000 to 2019. It examines the trend of access to clean fuels and technologies for cooking (% of population) and access to electricity (% of population) in these member countries to understand the implications of changes in these two factors on female labour force participation. The data is taken from ILO Modelled Estimates, the World Bank Database, and World Development Indicators for the time period from 2000 to 2019. Unpaid work such as cooking is mostly the responsibility of women in almost all the countries of world. In lower middle and upper middle-income economies, due to poor infrastructural development, low income of individual and lower skill, availability and affordability become barriers in accessing electricity. Accessing clean fuels and technologies for cooking and accessing electricity can reduce the time spent by female on unpaid work, and will provide them convenience and improve their health. It will encourage female to participate in paid work.

## **Urban Poor: Understanding the Need of Urban Employment Guaranty Programme**

**Prakhar Anand**, Ph.D. Scholar, University of Allahabad, Prayagraj, Allahabad, Uttar Pradesh

Urbanisation in India has progressed in the same way that it has, elsewhere in the world. One aspect of the transition is a shift in employment from agricultural work to work in urban-based industries and services. This rapid urbanisation has ushered in new policy issues for a fast-growing economy like India, in terms of providing enough livelihood opportunities for those vulnerable. The Covid-19 lockdown in India has left many severe gashes that will not heal for a long time. One of these is the anguish of an entire country closing down due to frequent lockdowns, resulting in the eviction of hundreds of millions working in the informal workers. Because of the rising unemployment rate in urban areas fuelled by the Covid-19 pandemic, there is a growing demand for an MGNREGA-like job guarantee programme for the urban poor, as millions of people are unable to find work. Such employment guarantee programmes strengthen the 'Right to Life' established in Article 21 of the Indian Constitution.

Both, state and central administrations, tend to refer to towns as “engines of growth” for the economy, rather than places where thousands of people toil for a living. Covid-19 has caused a crisis in urban livelihoods on an unprecedented scale. The end of the lockdown in July-2020 has eased some of the damage on labour markets, but not all of it. Indian unemployment rates have rebounded to an average of 7.3 percent in the post-lockdown months of July 2020 to February 2021. The government's response to Covid-19 in terms of employment support has been on increasing allocations to the MGNREGA programme and the PM Garib Kalyan Rozgar Yojana aimed at the returning migrant workers. While these are essential measures, it appears that a substantial urban public employment generation programme with a job guarantee is an urgent need. Kerala's Ayyankali Urban Employment Guarantee Scheme has been in place for a few years and can provide some lessons for the future. These are essential milestones, but their scope and goal remain severely limited, with budgets of only approximately Rs 100 crores or so. The labour market is currently in a state of flux so several important procedures must be taken before expanding the employment guarantee to metropolitan areas.

## **The Employment Challenge: Skills Mismatch and Active Labour Market Policies**

**Seilienthang Baite**, Research Scholar, Manipur University, Imphal, Manipur

Across the world in general and in developing countries in particular, an unprecedented labour market shock has sent governments scrambling to preserve jobs. But given the scale of the fallout, they are insufficient. India's unemployment rate sharply rose to 7.11% in 2020 from 5.27% in 2019, as per a report from the Centre for Economic Data and Analysis (CEDA). Even before Covid-19 hit, India faced the challenge of skills-mismatch. The pandemic has only aggravated the situation. The issue of fixing/mitigating this skills mismatch was no simple exercise: it required an understanding of the implications of everything from education and training to social safety nets.

The pandemic has placed an urgent demand on individuals to acquire new skills, reskilling, and upskilling to adapt to the new normal. In line with this, Active Labour Market Policies (ALMPs) can play a crucial role in helping the government mitigate this issue. These are government programmes that intervene in the labour market to help the unemployed find work. It helps equip individuals with the necessary skills to find new employment opportunities quickly, and to aspire for better jobs in the future. It plays a key role in underpinning the economic recovery through helping jobseekers find jobs, making available training for those most in need, and providing support to those who struggle most.

As the country gears up to train workers for jobs that may not even exist a few years from now, it is vital to promote experiential methods of learning that promote higher-order cognitive and non-cognitive skills, such as self-learning, learning to learn, critical thinking, creativity, problem-solving, and interactive social skills.

This paper highlights the issue of skills mismatch in the labour market, its causes and the steps that can be taken up to mitigate the issue. It will also provide policy recommendations that can assist policymakers in this regard.

### **Governing Artificial Intelligence, a Game-Changer, To Make it an Opportunity Rather than a Threat for the Employment**

**Chaitali Jani**, Assistant Professor, L J School of Law, Ahmedabad, Gujarat

**Subhash Rathor**, Professor, University School of Law Gujarat University, Gujarat

Artificial Intelligence (AI) is being used in every sphere of life and is becoming increasingly prevalent across businesses. The world as we know it today will not be the same in a decade due to major technological advancements such as AI, robotics, and blockchain. The reason for the increased use of AI is not its efficiency or accuracy, but unlike humans, it does not go on strike, will not demand high wages, bonus, leaves, insurance or pensions. Due to these technological developments, the working environments and the labour market will change completely. The crucial question, is how AI fits into our current legal and economic policy framework. It is vital to analyse the issues that AI raises in different areas that affect the labour force. Every essential innovation should be socially acceptable and justifiable.

For India to achieve a competitive advantage, AI is a strategic imperative. The NITI Aayog is working to regulate AI across several domains. In June 2018, NITI Aayog prepared a discussion paper on the National Strategy for Artificial Intelligence (NSAI). The NSAI highlights the importance of a sustainable system that allows cutting-edge research to not only solve societal problems and act as a testing ground for AI breakthroughs but also to position India as a global leader by extending these solutions. There has to be a paradigm shift in the existing laws and policies. All of these laws and policies should be tailored to deal with AI and its potential economic impacts, with a special focus on protecting workers. Employees in India are extremely vulnerable. India's aim to become one of the world's trailblazers in the AI race should not be done at the expense of workers' rights. This is why

a framework should be built in such a way that it is economically beneficial to the employers, helps economic growth, and protects workers' rights at the same time.

The labour laws governing the working relationships and can create a new structure to integrate the easy transition to the new technological era at the workplace with the advent of AI. In long run, it will not be profitable to compete with AI but to accept it as a new way of life. The paradigm should be "Human with AI" rather than "Human Versus AI".

This article aims to provide in-depth evaluations of the socio-economic and legal obstacles that AI systems will create in the field of workforce management. An attempt has been made to ponder over what can be the plausible approaches to deal with AI.

Gainful employment is crucial for reducing long-term poverty and inequality. Instead of considering AI as a threat to employment, it can be a game-changer and can create many untapped opportunities for workers. For India, the major problem is not technological unemployment but technological employability. It is about making one's self-compatible with AI to survive in the job market. Compared to other advanced countries, India's challenges are far more, as many of the workers in India are illiterate and it is a challenging task to provide all of them with lucrative employment in the AI era. Here, thought is provoked regarding giving personhood to AI and in that scenario: can employment benefits be extended to AI, as well as can AI be made liable to pay taxes? Another issue dealt with is, how to decide the responsibility centre for the mistakes committed by AI. The paper also deals with some new areas like developing the gig economy, the role of employers, employees, government and educational institutions, in making the workforce AI compatible.

### **Nature of Work and Status of Social Protection of Unorganised Women Workers of Coal Mines: A Study of Dhanbad (Jharkhand)**

**Prity Kumari**, Research Scholar, Central University of South Bihar, Gaya, Bihar

A large number of people have historically been employed in coal mining, which is a labour-intensive sector. Among the industry's distinguishing characteristics is its overwhelming majority of women workers. More than 90 Percent of them come from economically and socially marginalized backgrounds. For a long time, coal miners' socio-economic conditions have been the subject of intellectual and policy concerns. In the coal mining industry, a number of uncertainties still exist today, ranging from health risks to a lack of social protection. It is important to investigate these issues and concerns thoroughly and to implement appropriate legislative measures to improve the working conditions and lives of coal mine workers. The participation of women workers has increased in the labour market, yet they haven't achieved equal rights with men. Even in the male dominated patriarchal coal mining industry, women work with men. Earlier women in mining industry had load coal, break coal, make explosives used for mining, transport the coal one place to another in baskets (which is called 'Jhoda') and such female labourers were called 'kamin'. Currently women work only in surface jobs which include working as a wagon loader, heavy vehicle operators. Another dark side of the coal industry is illegal mining, unorganised workers, child labour, fatal accident, landslide, exploitation of

environment, explosion etc. Unorganised Sectors flourished in various industry women workers work in the unorganized sector for their family livelihood. Especially in Jharkhand (Dhanbad), most of the workers belong to tribal communities. They are illiterate, unskilled and unaware of their rights, so they easily targeted by contractors. Many women go to work in the quarry with their children, due to the lack of proper arrangements in the mines, thus the lives of children also pass in the darkness of coal mines. Gradually the children of the mineworkers end up in child labour. Being uneducated, the rights of workers are violated by the contractors. The miners are provided minimum wages, the hours of work of the workers in coal mines are also decided by the contractors. Additionally, when the miner meets within an accident, the contractors do not take responsibility for loss of life or property. Also, women workers face numerous problems, including physical abuse, mental and sexual abuse.

In this paper, we examine to decipher the working conditions and social status of social security on coal miners in the Dhanbad district in Jharkhand. This paper is purely based on Primary data and secondary data. Primary data were collected through interview schedules and secondary data through newspaper, article, magazines and government websites.

### **Social Protection in India: Challenges and Plausible Solutions**

**Prabhakar Reddy Tada**, Guest faculty, CURAJ, Ajmer, Central University of Rajasthan, Rajasthan

Social protection (SP) plays a critical role in achieving sustainable development, ensuring social justice and realizing human right to social security for all. Thus, social protection policies are essential elements of national development strategies to reduce poverty and vulnerability across the life cycle and support inclusive and sustainable growth by enhancing household incomes among others. In fact, social protection has been established as a critical conducive policy component by which the Government is addressing the vulnerability of poor when shocks occur. The framework for looking at the SP system include; promotional, preventive and protective measures.

Against the background, the study is to identify the challenges faced in the implementation of social protection programmes while trying to attempt situational analysis of social protection in India among others.

The existing social protection system is suffering from challenges such as improper targeting, inadequate coverage, sustainability issues, lack of solid policy and institutional framework, lack of coordination and coherence between different levels of government and various ministries, lack of updation of disaggregate data and information, lack of inter-linkages between different social protection programs and lack of gender focus. The Government need to bring in changes in 'Code on Social Security' to make it more meaningful and relevant to the workforce in the country. The issues like universality of social protection and portability of benefits need to be addressed.

The way forward include; designing appropriate targeting mechanisms based on authentic data and 'unified data base' creation on the actual beneficiaries by the government administration that would result in 'evidence base' by which tracking the benefit received or not becomes possible. Further, evidence base created is useful in policy and programmatic action to improvise the existing ones

efficiently among others. Regular monitoring of the implementation arrangements and the processes would result in avoiding the inclusion and exclusion errors. Designing tailor made social protection programmes based on the specificities and diversity of the population and avoiding overlap in delivery of programmes within and across different levels of government would enable in covering the unreached and providing efficient social protection to the needy population. Minimum social security standards, the universality and portability of social protection benefit, when people migrate to other places, needs to be addressed by amending the “Code on Social Security”. Further, moving to more consolidated and cash based social assistance programs for the chronically poor and addressing the needs of urban poor is need of the hour.

Finally, universal social protection requires additional funding which can be met through fiscal space creation exercise and all eligible population should be covered without leaving no one behind. Therefore, the Government of India should allocate more funds for social protection systems in this budget and constitute experts committee to look into the mobilization of resources and implementation etc. .

### **Role of Agricultural Labour Household in Social Protection with Special Reference to the Tamil Nadu**

**Rajesh Kanna Raji**, Assistant Professor, TILS, Chennai, Tamilnadu

**Sujatha Venkatesan**, Scholar, SCPJC, Tamilnadu

Agricultural labourers are the most vulnerable section of the society. Low wages, unemployment and poverty forced them to live a life of misery. It is a known fact that this segment of labour force is highly unorganized thereby not covered by the plethora of labour legislations enforce in India. Agricultural workers constitute the largest segment of workers in the unorganized sector. Many small and marginal farmers, because of their small and uneconomical holdings and low yield, also work on the land of others and hence qualify as agricultural labourers. The original concept of social security which covered only contingencies is not sufficient for agricultural labourers as they are not able to fulfil their minimum basic needs such as food, cloths, shelters, education, health and sanitation etc. The vulnerability of agricultural labourers requires social protection measures to cover both basic needs and economic security. In this paper, examines the agricultural labour households needed for social protection in Tamilnadu.

An attempt has been made to understand the concept of social protection, security needs of the agricultural labourers and the initiatives of the state to implement the instruments of social protection for agricultural labourers. The major security needs of the agricultural labourers are food security, health security, housing security, employment security, income security and old age security. But the initiatives of the state to implement the instruments of social protection for agricultural labourers are disappointing to us. So the state will have to play greater roles in implementing the instruments of social protection for agricultural labourers as compared to other workers of unorganized sector as there is no formal relation between employer and employee in agriculture and employment is casual in nature. However, it needs to be mentioned here that the increasing globalization of the last decade

is modifying the role of the state through various market mechanisms. A welcome aspect of these new initiatives is the visible efforts of the government towards designing and implementing right-based social security systems, along with enabling governance structures, which inter alia seek more participation from all other stakeholders, including the targeted beneficiary.

### **Homesickness – Coping Strategy and Perceived Social Support among Post Graduation Students**

**Shubham Kumar**, Department of Sociology and Social Work, CHRIST (Deemed to be University), Bangalore, Karnataka

The study “Homesickness, coping strategy and Perceived social support” among post-graduation students aims to find the relationship among all these variable and the effect of Age groups, Gender and academic year of the student. This study is conducted among Post Graduation students from Christ (Deemed to be) university, Bangalore (INDIA). Total number of participants are 76, n=67, in which female = 45 and male 22. Out of 67 participants, 35 were first year students and 32 second year students. There are 3 age groups participants in this study i.e., >20, 21-25 and 26-30 with 9, 50 and 8 participants respectively. This is descriptive quantitative study with 3 standardized scale and one socio demographic questionnaire. SPSS is used for data analysis and the tests used are; Spearman correlation Test, Independent T Test, Mann Whitney U test and Kruskal Wallis test. In this study the researcher found that there is a positive relationship between Homesickness and Perceived social support and a negative relationship between Homesickness and coping strategy.

This study has also found that there is no significant relationship of Gender, Age group and academic year with Homesickness, Coping Strategy and Perceived Social support.

### **Factors Driving Employment Growth in Indian Manufacturing: Labor Market Flexibility vs Rate of Investment**

**Angarika Rakshit**, PhD Candidate, Indian Institute of Technology Delhi, New Delhi

The organized manufacturing sector in India which had performed quite poorly for decades, saw a near doubling of its workforce in the first fifteen years of the 21st century. Using a fixed effects panel regression model, this paper attempts to understand the relative importance of labour market flexibility and rate of investment in explaining this employment growth. The results indicate that employment growth in the organised manufacturing sector is better explained by growing investment and not by increased flexibility in the Indian labour market.

The data used for this analysis is an unbalanced state-industry panel from the Annual Survey of Industries for fifteen years from 2000-01 to 2014-15. The panel is constructed by aggregating (non-panel) firm level data for these years at the State and 3-digit level of industries. NIC 1998, NIC 2004 and NIC 2008 industries are concorded at the 3 digit level to represent all industries according to NIC 2008 classifications.

A fixed effects panel regression model with the following specifications is used

$$\text{Lit} = \beta_1 \text{Iist} + \beta_2 \text{IDAshare}_{it-2} + \gamma \text{Cist} + \theta_i + \mu_s + \delta_{\tau t} + \text{uist} \quad (1)$$

where subscript  $i$  and  $s$  represent each industry and State respectively and  $t$  represents year.  $\text{Lit}$  is rate of growth of employment,  $\text{I}_{it}$  is the rate of investment,  $\text{IDAshare}_{it-2}$  is the proportion of firms covered by Chapter VB of the Industrial Disputes Act (IDA) with a two-period lag,  $\text{C}_{it}$  is the vector of control variables,  $\theta_i$  is the industry fixed effect,  $\mu_s$  is the state fixed effect,  $\delta_{\tau t}$  is the year fixed effect and  $\text{uist}$  is the random error term. Rate of investment is measured as the ratio of net investment to the total stock of fixed capital where investment is the difference between total fixed capital stock in period  $t$  and  $t-1$ .

The variable  $\text{IDAshare}_{it-2}$  is an indicative measure of labour market flexibility. It captures the bite of Chapter VB of IDA which is supposedly responsible for introducing an exceptional degree of rigidity in the Indian labour market. It is measured as the proportion of firms where the IDA is applicable, with a two-period lag. Since a firm comes under the purview of Chapter VB of the IDA if it employs 100 or more workers on a regular basis, the numerator in IDA is the total number of firms in a state-industry category which employs 100 or more direct workers. The denominator is total number of firms in that state-industry category. Since IDA applicability is based on an employment threshold, it is possible that positive (negative) rate of growth of employment in a particular year may lead to new firms coming under (existing firms going out of) the purview of IDA. Since rate of growth of employment is determined by employment in period  $t$  and in period  $t-1$ , using either  $\text{IDAshare}_{ist}$  or  $\text{IDAshare}_{ist-1}$  in equation (1) could potentially lead to the problem of simultaneity and reverse causality. In order to address such a source of endogeneity, the IDAshare variable is used with two period lags so that  $\beta_2$  reflects the impact of existing IDA coverage on future employment growth.

The vector  $\text{Cist}$  is a vector of variables which have the potential to simultaneously impact both employment growth and rate of investment and/or IDAshare. The vector  $\text{Cist}$  includes rate of growth of output, rate of profit, average wage rate, labor intensity in production, intensity of contract labour usage and the average firm size in each state-industry category. Since the IDAshare variable is used with two period lags, the control variable average firm size is also included with two period lags so that it controls for the impact of existing firm size on rate of growth of employment and rules out any contemporaneous changes in size and employment growth.

The main results show that in the base model, the coefficient on rate of investment is 0.370 and it is significant at 1 percent level of confidence. After adding the full set of controls, the coefficient falls to 0.173 but remains positive and highly significant. Even after adding all the fixed effects as well as state-specific time trends as a robustness check, the coefficient remains positive and significant at 1 percent level of confidence with a marginal increase in its value to 0.176. On the other hand, the IDAshare variable with 2 period lags, has a marginally positive coefficient of 0.006 in the base model without controls which falls to -0.022 after adding the vector of controls and further to -0.053 once all the fixed effects and state-specific time trends are added. However, at every stage the coefficient remains not significant even at 10 percent level of confidence. The relative importance of the explanatory variables

rate of investment and IDAshareist-2 remain the same when the model is run separately for labour- and capital-intensive industries. However, the magnitude of the coefficient on rate of investment is higher at 0.429 for labour-intensive industries. Thus, the paper concludes that rise in rate of investment is a much more important determinant of employment growth in the organised manufacturing sector compared to increased flexibility in the labour market.



**TECHNICAL SESSION  
(BRIEF PRESENTATIONS-2)**



## **Sustainable Development Goal (SDG): The Employment Challenge for Persons with Disabilities**

**Saurabh Chaturvedi**, Associate Professor, National Institute of Fashion Technology, Kangra,  
Himachal Pradesh

The Sustainable Development Goal cannot be achieved till the time employment reaches all the sectors of society including Persons with Disabilities. Persons with Disabilities face higher unemployment, lower illiteracy levels, skill mismatch, inappropriate training, and employer bias. This research will try to find out employment challenges faced by Persons with Disabilities in the Indian Context.

This study analysed data from the Census of 2011 to understand the socio-demographics of PwD in India. The study also reviewed 58 papers to understand employment challenges related to People with Disabilities. This Study also conducted a survey from 26 hotels in India through a questionnaire circulated with the higher management. All relevant parameters were rated on a Likert Scale and analysed through a weighted average

Actual prevalence of PwDs is much higher than claimed by the survey. The literacy rate among PwD is low compared to non-PwDs, and at the same time, the unemployment rate is higher. An analysis of Census of 2011 shows that 58% of the PwD come under the working age. India's Sustainable Development Goal can be achieved only after including PwD in mainstream employment with an inclusive approach. The research was restricted to four disabilities: movement, seeing, speech, and hearing; these disabilities account for 58 percent of all disabilities. The study finds the Hotel Industry employs these persons in larger proportions. The study further compares PwD and non-PwD employees on selected parameters from Employer's perspective

The study suggests a Sustainable Development Employment Growth model for People with Disabilities. The model gives emphasis on skill matrix for proper skill match as per disability, specialised training programme, availability of a potential list of candidates, proper social integration through an inclusive induction program, and most important removal of employer's bias towards PwD in the recruitment process.

### **Status of Decent Work in India**

**Nidha Fatima**, JRF, Guru Nanak Dev University, Amritsar, Punjab

**Neena Malhotra**, Professor and Head of the Department, Guru Nanak Dev University, Amritsar,  
Punjab

Decent work for all is one of the main policy objectives concerning the labour market, promoted by various international organisations like the International Labour Organisation (ILO), United Nations etc. For this objective to get fulfilled, the international community should work together so that all workers from all nations, whether developed or underdeveloped, get jobs that is both decent and productive. India is also one of the founding members of the ILO and hence, has taken many efforts

from time to time to improve the working conditions of its employees. But, being a nation where most workers are employed in the informal sector, which is by definition such a sector where workers do not get any job- or social security, India underperforms on various indicators of decent work. This paper tries to undertake a macro-level study to determine where India stands with respect to the decent work standards. With the unemployment rate at 6.1% in 2017-18, India has not performed very efficiently in terms of employment availability of employment opportunities. The unemployment rate is even higher in the case of educated persons at 11.9%, and youth population at 15.6%. According to the Census of India, 2011, 10.1 million children were working in India, which indicates the prevalence of unacceptable work in the form of child labour at a very large scale. The positive point is that the numbers of child workers has reduced by 2.6 Million within the period between 2001 and 2011. However, India's performance in terms of adequate earnings and productive work is praiseworthy as the average daily wage rate of workers was INR 247 in 2011-12 which was higher than the national floor-level minimum wage rate. But there is a huge gap between the daily wages earned by regular and casual workers, which is a cause of concern. India has also performed well on the element of decent hours as all the workers actually worked for 37-48 hours per week in 2019-20 which is within the norm of 48 hours per week. With almost 89% of the workers being employed in the informal sector, it is so obvious that they must be working in unstable and insecure conditions. Though with continuous government efforts, a little movement towards formalisation of the labour force has started. Concerning the element of balancing work and family life, India has not performed very well for most of the time; females have to sacrifice their work-life in order to balance their family life. Also, the workers in India get unfair treatment on the basis of gender, caste, religion, race etc. It is often seen that the female workers have to face gender discrimination in terms of lesser pay rates, low chances of getting employed in topmost positions and lack of regular job opportunities. A careful examination of India's performance on all these indicators over the years shows that through various efforts by the Indian government, some sort of improvement is there and the country has started moving towards a better future of work.

### **Role of Contextual Factor in Determining Labour Outcomes: Analysis of PLFS Data on Earning of Casual Workers**

**Md Zakaria Siddiqui**, Associate Professor, Gulati Institute of Finance and Taxation,  
Thiruvananthapuram, Kerala

**Mohd Feroz Khan**, Joint Director, Panchayati Raj and Drinking Water Department, Government of  
Odisha, Odisha

The paper focuses in two most important constituents of the Indian labour market i.e., casual workers and self-employed workers, and the nexus between them. These two together constitutes around 87.51% of workers in rural areas and 59.19% workers in urban areas. The paper contends that the existing casual wage rates play a crucial role in determining the prevalence of self-employed workers in the economy, which in turn gets determined by level of human development.

Applying a multilevel modelling technique on available unit-level data from Periodic Labour Force Survey 2019-20, we show that the level of human development has large independent influence on wage rates of casual workers in regional economies. About 26% of total variation in wage rate of casual workers can be attributed to independent influence of unobserved contextual factor operating at level of state after controlling for all possible household/individual level socio-economic and demographic factors such as education, social groups, economic status, age, rurality and gender. Interestingly, all socio-economic and demographic covariates taken together also explain roughly same proportion (26%) of variation in wage rates of casual workers in the country. Thus, contextual factors are at least as important as individual/household factor.

Further we find that the HDI at state level as contextual factor is able to capture more than 14% of total variance in the wage rates of casual workers, implying that the overall social policies of states do have significant effect on wage rate formation.

These results indicate that over all social and human development of the state exerts an independent and quantitatively large influence on labour market outcomes, which is over and above the factors that operate at individual/household level. This implies that social policies have a much broader and welfare enhancing impact than was previously understood.

### **Quantifying Labour Contribution of Rural Women in Crop Production in India**

**Anil Kumar**, Principal Scientist, ICAR-Central Institute for Women in Agriculture, Bhubaneswar, Odisha

**Ananta Sarkar**, Principal Scientist, ICAR-Central Institute for Women in Agriculture, Bhubaneswar, Odisha

**Neetish Kumar**, Scientist, ICAR-Central Institute for Women in Agriculture, Bhubaneswar, Odisha

The work women do to run the household, the fields and the society, remains unaccounted for because of the infirmity in the definition of worker to account for the nature of work done by women. Women play a key role in agriculture apart from their reproductive role and household activities, care giving, involvement in the society/community etc. The actual problems women face, get concealed and their hard work in running a household and the society is less appreciated. At present the data on participation of men and women in various sectors of agriculture are being taken as an alternative to contribution (unknowingly) by many researchers. The paper presents an estimate of participation and contribution of men and women in rural areas of India using unit level data from the first Time-Use Survey-2019 (TUS-19). There is need to estimate the actual contribution of both men and women in agriculture, and more specifically in crop sector, to understand and appreciate the role they play and also to make enabling policies for them. Women's participation in crop sector is 13.3 percent as against 28.9 percent of men. About 31 percent of labours in crop production are women. Further, women contribute 27.2 percent of the total labour input in crop production. Women in agriculture spend three times more in unpaid activities and have daily working time of 9.5 hr as compared to 7.9 hr by men.

To run an agricultural household, women contribute more time than men. There is need to share the unpaid domestic and care work for enhanced participation and contribution of women in agriculture and more specifically crop production. Moreover, the diverse nature of work of women should be quantified and appreciated even if they are not counted as workers.

### **Production Organisation and Market Structure in Rural Non-farm Sector: A Study of Some Handicrafts of West Bengal**

**Pritikana Char**, Assistant Teacher, BSKH Vidyalaya, Burdwan, West Bengal

During the early decades of the 20th Century, it was believed that the problem of underdevelopment in the newly independent countries could be mitigated through a process of growth, based on capital accumulation-led modern industrialisation. This capitalistic growth process would not only expand the modern sectors of the then underdeveloped countries but also transform the traditional sectors (Lewis, 1954). Thus, it was argued that not only traditional agriculture but also primitive/pre-capitalistic non-agriculture would either wither away or be incorporated into the growing modern sectors, or would at least transform into a vibrant segment of the growing economy.

However, the experience turned out to be starkly different. Although during the mid-20th century, in the then developing countries, the modern industrial base expanded, sizable accumulation of capital took place, and considerable improvement in state and market institutions achieved, large-scale quality employment generation within the growing modern sectors remained a distant dream. Despite modernisation through capital accumulation with the support of state and market institutions, a huge part of the population could not be incorporated into the growth process. Not only that, centuries-old farm and non-farm practices persisted, a variety of activities especially in the non-agricultural sector evolved beyond the circuits of the capitalistic growth process. Thus, instead of the targeted structural transformation of the underdeveloped economies and, hence transition of the traditional segments, ironically, the 'outside' (beyond the process of modernisation) kept on expanding steadily. Not only urban unemployment and underemployment grew considerably, there was very little transformation of the overwhelmingly traditional rural economy. Thus, along with petty agriculture, petty non-farm activities kept on persisting in the rural spaces of the developing countries. In fact, in many of the developing countries, although a part of the rural workforce moved out of agriculture, it could only find its refuge in the traditional non-farm sectors.

Thus, although there has been an occupational transformation within the rural space, very little has happened so far as modernisation and transition of the economy is concerned. A large number of people have left traditional agriculture, mainly to be engaged in rural traditional non-farm activities. Only a fortunate few could find place in the urban and rural modernising segments. Consequently, the rural non-farm economy has been growing steadily with a large traditional segment and only a small dynamic part. Along with the age-old traditional rural non-farm sectors, a variety of petty activities have evolved. These petty rural non-farm segments provide employment to a very large section of the population, and among these activities, handicraft is one of the most important.

Thus, a large section of the rural population survives on a variety of handicrafts – some earn the bare minimum for survival. Given the broader macro scenario where we experience a peculiar process of jobless growth, handicrafts provide an essential opportunity for the ‘outsiders’. Consequently, handicraft becomes an important area of discussion from the perspective of development of the so-called ‘outsiders’. Given the importance of handicrafts in ensuring employment and basic livelihood, even in this so-called modern era, it is obvious that researchers would be interested in understanding the characteristics of this sector. When we face the problem of jobless growth, a thorough understanding of handicrafts could provide us with a viable path of inclusive growth. Thus, a study of handicrafts is not only important from a theoretical perspective but also from the policy perspective of inclusive development. If we look at the characteristics of handicrafts, we may identify interesting theoretical insights from their production organisation, incentive structure, and market structure. This knowledge could also give us some idea about the probable policy support that might be required to ensure a process of growth with job creation.

### **Judicious Utilisation of Farm Resources for Sustainable Agriculture in Punjab**

**Jatinder Sachdeva**, Senior Agricultural Economist, Punjab Agricultural University, Ludhiana, Punjab

**J M Singh**, Director, AERC, Punjab Agricultural University, Ludhiana, Punjab

**Jasdev Singh**, Principal Agricultural Economist, Punjab Agricultural University, Ludhiana, Punjab

**Baljinder Kaur Sidana**, Scientist (Q.M.), Punjab Agricultural University, Ludhiana, Punjab

The human labour usage in Punjab under the existing optimised plan and with the introduction of various resource conservation technologies such as, Happy Seeder for wheat sowing, direct-seeding of rice and short duration paddy varieties, recommend higher human labour usage, which is good for Punjab agriculture where labour is mostly underutilised, except in peak wheat harvesting, paddy transplanting season, and cotton picking. The optimised plan also suggested a considerable decline in farm power usage, which is quite good in terms of energy-saving as well as judicious use of resources such as: irrigation water, diesel use for operating tractors, running of generators and diesel engines, etc. The existing optimised plan along with the introduction of various interventions reveals the saving of nitrogenous and phosphatic fertilisers, which is advantageous for Punjab agriculture. On the other hand, most of the optimised plans with technological interventions recommend higher use of potash fertiliser which is mostly applied to the potato crop by the farmers and as per soil test requirements, to other crops. The optimised plan under various interventions recommends bringing more area under wheat sown with Happy Seeder, Short Duration paddy varieties and Direct Seeded Rice technology, which results in saving of precious groundwater as well as an increase in net returns over Cost.

The results bring out a clear emphasis on adopting resource conservation technologies, such as Happy Seeder, direct seeding of rice, and short duration paddy varieties by the farmers. The use of these technologies can be a win-win situation for the farmers where there can result in optimal utilisation of human labour, saving of precious sub-soil water, paddy straw management, alongside increasing or at

least maintaining the same level of income by the farmers. For promotion of these technologies, the government has been taking various initiatives but needs to be accelerated for fulfilling the objective of sustainable development.

### **The Employment and Livelihood Challenge among the Informal Handloom Weavers during COVID-19 and Lockdown in Odisha**

**Ashish Kumar Meher**, Ph.D. Research Scholar, Central University of Tamil Nādu, Thiruvavur,  
Tamil Nadu

**Prasant Kumar Panda**, Professor and Head of the Department, Economics, Pondicherry University,  
Puducherry

The coronavirus pandemic and the subsequent lockdown have brought the world economy to a standstill. The unanticipated economic fallout has caused drastic decline in income, consumption, production and distribution and a surge in unemployment. Though the pandemic-led lockdown has serious repercussions on every sector of the economy, the unorganised sector and the informal workers mostly employed in casual work, household-based occupation and small business activities, have been the most impacted. This paper attempts to examine the employment and livelihoods challenge encountered by the informal handloom weavers due to Covid-19 and lockdown in Odisha, India. For this study, primary data has been collected from 435 active handloom weaving households in the Bargarh district of Odisha. Employing a descriptive and inferential study design, the findings show that acute financial constraints, huge income loss, unemployment, decline in savings-investment and high mental stress has been experienced by the poor handloom weavers. The total income loss of the entire weavers starting from April 2020, ranges between Rs.9,600 to Rs.201,600 depending on the size of unit and volume of production. There is a strong association of income loss due to Covid-19 lockdown with the factors such as unemployment, effect on the handloom and allied activities and the impact on livelihood. In the absence of income and employment protection, most of the handloom weavers have borrowed money from informal sources and have survived on government-provided free rations and financial help. However, none of them have shifted to any other work or occupation, because of lack of skills and other work opportunities. Most of the respondents received free ration and cash, offered by the government as a corona relief measure. Around 50 percent of them also received cash money in the female Jan-Dhan account. However, these assistances were scanty in nature and have not helped the weavers to withstand the employment and income crisis. The government of India also declared a corona relief package of INR three lakh crore to support the Covid affected MSMEs, but there is no specific scheme announced to support the informal handloom workers. At this time, supplementary policy measures in the form of weavers' specific government schemes with wide coverage and outreach will be helpful for the handloom workers.

## **Employment Generation of Textile Industry in Karur District, Tamil Nadu**

**Vetrivel Krishnan**, Assistant Professor, Department of Economics, Bharathidasan University,  
Tiruchirappalli, Tamil Nadu

**Srinivasa Raghavan**, Professor & Head, Department of Library & Information Science,  
Bharathidasan University, Tiruchirappalli, Tamil Nadu

**Radhika Devaraj**, Assistant Professor, Department of Computer Science, Indra Ganesan Arts &  
Science College, Tiruchirappalli, Tamil Nadu

**Ajith Kumar**, Research Scholar, Department of Economics, Bharathidasan University,  
Tiruchirappalli, Tamil Nadu

The textile industry is an important and largest sector in the Indian economy in terms of output and generation of employment. The comparatively low investment and utilisation of the local and low-skilled labour also mean that the industry is relatively footloose and is able to adjust to changing market conditions quickly. India has also been a major player in the world textile markets. It is the third major producer of cotton, second largest producer of silk, the biggest producer of jute and the fifth largest producer of man-made fibres and yarn. It has an overwhelming presence in the economic life of the country. It is the second largest textile industry in the world after China. After agriculture this industry provides employment to maximum number of people in India employing 45 million people.

The textile industry in Tamil Nadu is an important segment of the Indian economy. It is the forerunner in Industrial Development. Handloom, Power loom, Spinning, Processing, Garment and Hosiery are the various sectors of the textile industry in Tamil Nadu and known for the largest economic activity next only to agriculture in providing direct and indirect employment. The textile industry plays a vital role in the Tamil Nadu economy by providing direct employment nearly one million people, GDP and foreign exchange earnings through home textile exports such as table linens, kitchen linens, bed linens toilet linens, and wall hangings. It contributes to 14 percent of the manufacturing sector in the state. The Coimbatore, Erode, Karur, Gobichettipalayam, Tirupur and Perundurai in Tamil Nadu, are the largest garment exporters in state.

The present study has made an attempt to understand the employment generation of textile industry in Karur District of Tamil Nadu. This study completely depended on the secondary data. The data collected from District Industrial Centre (DIC), District Statistical Department, Textile Industry Reports, published material like Journals, Books, and Newspapers and so on. This study comprises of the performance of textile industry at Karur District. The secondary data have been collected for this research work is limited to eight years during 2008-09 to 2015-16.

## **Work from Home: Living with Work**

**Jyoti Sharma**, Research Scholar, Dr. Ram Manohar Lohiya National Law University, Lucknow,  
Lucknow, Uttar Pradesh

Our lives are centred around work, and most of the work we do either professionally or as part of our daily lives is primarily to sustain ourselves. The Covid-19 pandemic changed our lives completely because of the lockdown, and virtual world became a new reality. A shift in the workspace was also visible, and home became a new workspace. Working from home impacted not only employees but also the social relations of employees. Working from home was even more difficult for female employees because domestic work and child care responsibilities are typically assigned to females in families. This paper examines problems faced by employees while working from home, the impact of working from home on an employee's health, well-being, and social relations. The research, keeping in mind the present social situation created because of the Covid-19 pandemic, will sociologically understand the concept of "sociology of work", the future of work, and how the change in the workspace impacts the everyday lives of employees. The researcher has conducted primary research using the online questionnaire and also data from analysed secondary resources, such as newspaper reports and research conducted on working from home worldwide.

## **Impact of the COVID-19 Pandemic on Employment in Information Technology Sector in India**

**Tapas Sudan**, Research Scholar, Shri Mata Vaishno Devi University, Katra, Jammu and Kashmir

**Rashi Taggar**, Assistant Professor, Shri Mata Vaishno Devi University, Katra, Jammu and Kashmir

Several state governments have announced lockdowns and alternative regulations to curb the spread of Covid-19 infections, an act which has also contributed to the loss of jobs. In response, several individuals working in various towns and cities have migrated to their hometowns. The subsequent decline in infections has not revised the economy or re-created the jobs, dashing the hopes of a rebound in economic activity. For instance, around 5.46 million employees lost their jobs in both the formal and informal sectors in October 2021. However, there have been some job created in sectors such as information technology, retail trade, and education. The Government of India has planned to create six million jobs over the next five years. But the primary research question arises: how will government-private collaboration mitigate the job crisis and unemployment in India, specifically in the context of the Fourth Industrial Revolution (4IR)?

This paper aims to provide an understanding of the current employment situation in India as well as how the 4IR can provide jobs and resilience against the Covid-19-induced disruptions in the future. The paper elicits the challenges in generating employment through development of the 4IR-compatible skills development for the information and technology sector (IT) sector in India. The Covid-19 pandemic can speed-up the digital applications in work and the workplace. 4IR technologies can also mitigate the pandemic impacts on health and income of the people. Application of the 4IR technologies can speed

up during the pandemic and post-Covid-19 recovery. However, on the flip side, greater digitalisation of economic sectors and displacement of middle-skilled labourers can increase income inequality. It is likely that this trend will be continued in future as well. This calls for robust skills development and training programmes for the displaced workers and relevant labour policy measures for the new job seekers and the future workforce. There is greater need to invest in speedier digital readiness not only to contain the infections from the virus, but also to carry normal economic activities. There is need to develop a robust infrastructure, digital cooperation, digital skills and digital education for rapid digital penetration. Public-private collaboration in digital skills development can facilitate greater digital readiness and faster digital transformation. Compatible regulatory policies are needed to incentivise the private players in skills development programmes targeting the low-skilled displaced workers, new entrants to the job market and future workforce. New vocational institutions must be started with public-private collaboration to train the future workforce to meet the employment challenges of the 4IR technologies, such as artificial intelligence, robotics technology, machine learning, data analytics and other emerging novel technologies and for speedier economic recovery from the pandemic crisis.

### **App Based Workers: Employment Patterns, Prospects and Functional Aspects**

**Asiya Nasreen**, Assistant Professor, Jamia Millia Islamia, Delhi

Globalisation has led to the opening up of economy, eventually creating vistas of employment opportunities in different sectors. Over the years, the dominance in employment generation has been in the tertiary or service sectors in urban and semi-urban areas. At the heart of the service sector has been the platform or the gig economy, where through online platforms and apps, workers are finding opportunities of work as freelancers and as app-based workers. The former known as “crowd-work” is performed by skilled professionals while the latter is understood as “app-based work” and is performed by semi-skilled or unskilled professionals.

Extensive use of mobile phones, easy access to internet facility, internet and mobile banking, and fast penetration and usage of mobile apps for varied purposes have bolstered the growth and expansion of platform economy particularly the retail e-commerce transactions. The Hindu Business Line, 2021 estimates that retail sales, driven by e-commerce companies, are estimated to increase by 31% which is around USD 32.70 Billion. The vast consumer market driven by the apps are easy way to connect people with service providers, which has altered the way consumers consumed ‘things’ daily, to order commodities at their homes. The range of commodities vary from clothes, groceries, lifestyle products to cooked food items etc. The goods and products ordered online are delivered by online demand workers called ‘Home delivery workers’ or ‘delivery workers’.

Many youngsters are earning their livelihoods through the app-based work; but delivery workers are essentially “informal economy” workers. During specific occasions their hiring get accelerated to meet the needs of customers. For example, ‘Swiggy’, a technology-based food delivery application had 1.2+ lakh individuals to work as delivery executives in 2019, while Zomato has been hiring more than

5,000 delivery partners a week in India and seeks enhance their number by 40% to manage the growing demand in 2000. However, officially, statistical data are unavailable to indicate the extent of workers employed through digitally intermediated platforms.

An empirical study has been conducted with 200 home delivery workers working in different E-commerce companies in National Capital Territory (NCT), Delhi with the following objectives: To know the socio-economic profile of home delivery workers; To examine the nature of employment and the working conditions of delivery workers; To know the prospects in delivery work.

All the respondents were males, who were contacted through snowball sampling and semi-structured interview schedules. The information was triangulated with four Focused Group Discussions (FGD). The responses received were coded and analysed in the Excel software and through SPSS 22.

Majority of the respondents (91 percent) were less than 40 years of age, which is the most productive age group in society. The median age was about 27 years. Nearly three-fifths (59%) of them were married. Educationally, all were literate, most of them completed secondary school education, and some were graduates and above, including those with technical degrees. Through delivery work, were able to earn rupees 10,000/ to 25,000/ per month. Nearly 2/3<sup>rd</sup> of them were migrants and had come to Delhi for livelihood.

Two broad segments within delivery of products were included – food and non-food items, which has been the full-time employment for 94 percent of the respondents, working minimum of 10 hours a day which extends up to 12-14 hours. The inclination was towards delivery of food items (83 percent) due to quick payments received for the work. The workers were given signed and written contracts of employment (64%), followed by App based contract (34.5%). Flexibility in working conditions and terms of employment were at the base of App based contracts.

Around half the respondents were receiving social security provisions, which included Provident Fund (PF), Employees State Insurance (ESIC), and life insurance, for which they were required to make contributions. Incentives and bonuses were provided as benefits on completion of a certain number of orders or working during peak hours.

Regarding the prospects in delivery work, those who were working in App-based delivery platforms, shared that the company has made them 'Delivery Partner' and do not consider them as their employees. Reasons cited for the vulnerability included: job being completely demand-based, arbitrary closing of log-in ID, physical fitness for travel-based strenuous jobs, ad-hoc policies of the e-commerce companies, and gradual decrease in the delivery charges. Lastly, retention or termination depends upon the feedback given by the customer.

The findings lead one to conclude that app-based delivery work is becoming a challenge for the unskilled labour force in terms of stability and fortify that it is non-standard form of work, offering insecurity and exploitation. Innovative, cost cutting patterns of employment are created that are beyond the traditional employer-employee relationship, which makes its work force informal. Superficially, it provides income avenues which are not sustainable in a sense that requirement of livelihood drives the person to pursue low paid jobs, but as the agility of youth hood fades, stability is missed in the employment contracts.

## **The Plight of Contract Teachers during Covid-19 in India: Insecurity to Joblessness**

**Furkan Khan**, Research Scholar, Indian Institute of Management, Ahmedabad, Gujarat

The change in structure of economy, reform and intensified competition at global level have increased the demand of informal workforce. In a neo-liberal regime, the shift from decent work to non-standard work and continuous change in job characteristics are the regular features of formal and informal sectors. The pro-market and employer-centred reforms have changed the labour market structure, triggering the adoption of precarious work. The precarious work is associated with low wages, lack of social security, temporary/part time contract, and easy termination. Employers prefer ad hoc labour: it gives them flexibility, low labour cost, control over the labour process and finances. In India, macroeconomic stagnation amidst fiscal deficit in mid-1980s and adoption of LPG policy in 1991s, played a significant role in the adoption of precarious work. Precarious work has engulfed both formal and informal sectors in India.

The education sector is not left untouched. In, India 12.7% of the total teachers are contract teachers. The rising global competitiveness, universalisation of education and improvement in school productivity have accelerated the demand for further investment in the education sector. The fiscal deficit and budget constraints in various states restrain the state governments to hire regular teachers, leading to them hiring contract teachers. The contract teachers are considered cost-effective, with low pay without any benefits. In the literature, the contract teachers' work is understood through the lens of cost effectiveness, efficiency and utility, but it is not captured through the lens of precarious work in formal sector, and how it is converting teachers' "noble" profession into a 'vulnerable' profession. The contract teachers are offered low remuneration, temporary contract and are not covered under the cushion of any safety-net. These job features have left them into vulnerable employment situation, especially during the Covid-19 period.

According to a CSF private school report, teachers' salaries are delayed, they are working on low salaries, and times not paid at all. Contract teachers always live under the threat of joblessness and are cut-off from valued features such as promotion, social security benefits, and periodic increment in pay. In this study, I used the Rodgers & Rodgers (1989) precarious work framework to understand public school contract teachers' work experiences and what are the factors that generate "Precariousness" (job instability, insecurity, no control, economic and social vulnerability) in formal sector (public schools). I explored further, how the Covid-19 accentuated "Precarity". I collected data from twelve contract teachers from two Indian states (Delhi and Uttar Pradesh), and conducted semi-structured interviews. Thematic analysis was conducted using the Braun & Clarke (2006) approach. The result of data highlights major factors, that contribute to "Precariousness" in public school contract teachers' job are: Fixed Renewal Contract but No Guarantee, Deprivation from Social Security and Social Wages, Impact of Changing work nature on Individual, Family, Community, Workplace dynamics and Inequality. The outbreak of Covid-19 further accelerated employment vulnerability. It also came out that they had to visit schools when asked to report and they were attached into various essential services during

pandemic. They were not provided social security and not covered under any medical insurance. The job-insecurity during Covid-19 has increased their vulnerability. The differential treatment to permanent and contract teachers during Covid-19 demoralised the contract teachers and impacted them socially, psychologically and emotionally. The deprivation from social security, uncertainty of out-going work and underpay has led to stress and poor health, and the pandemic has created unprecedented burden on the families.

### **The Change: COVID-19 and Status of Employment in India**

**Md. Quaisar Ali**, M.Phil. Scholar, Tata Institute of Social Sciences, Mumbai, Maharashtra

The Covid-19 pandemic has disrupted the labour markets globally since 2020, and the situation in India is no different. Millions of people have lost their jobs and the levels of poverty have worsened. In one hand, where the pandemic has shattered many hopes of employment, on the other it has opened some new vistas that may reshape work after the pandemic ends. This study investigates the effects of Covid-19 on the employment situation in India. To show the impact difference in the total participation rate and gender-wise participation rate this paper analyses data for the years 2019, 2020 and 2021: these show the negative trends in labour participation. Further, to show the changes in unemployment rate in the country, national unemployment data are analysed, which show the positive trend with an annual change of 1.65 percent in the year 2021. To make the analysis clearer, the urban-rural and male-female data on unemployment have been analysed and both these support the national unemployment trends. Furthermore, sector-wise data are analysed, including from including agriculture, services (financial services, non-financial services, public administrative services), and manufacturing (mines, manufacturing, real estate and construction). The agricultural sector shows an increase in the employment by about 5.9 million people during financial year 2020-21; whereas the other sectors show a fall in the number of people being employed. Towards the end the paper, the various initiatives taken by governments to combat the economic disruption and burdens on people are presented. The data used in this study are taken from various secondary sources but primarily the study has focused on the data from Centre for Monitoring Indian Economy (CMIE) and used software such as Microsoft Excel 2010 and Statistical Package for the Social Sciences.

## **Employment Challenges and Recovery in COVID-19 Times: Experience from India and South Asia**

**K. Ramesh Kumar**, Assistant Professor, Department of Economics and Rural Development,  
Alagappa University, Karaikudi, Tamil Nadu

Indian economy seems to have entered into a higher growth trajectory with an unprecedented average growth rate of 8.7 percent in gross domestic product (GDP) in the recent years. One of the fastest growing economies in the world, it is also one of the most unequal countries. The ongoing Covid-19 pandemic has directly affected the economic mobility conditions of low-skilled, less paid workers' employment, and the recovery is K-shaped; not helping all. By the end of January 2022, Covid-19 pandemic has exacerbated several forms of social and economic issues within the nation and outside it. It is still too early for a systematic understanding of its impact on intra-countries economic growth, followed by the employment challenges in South Asia and India. However, some high-frequency data sources help us to understand the interplay between the Covid-19 crises and its impact on employment challenges and recovery.

This paper attempts to focus on the impact of Covid-19 on employment and subsequent economic recovery in India particular, and South Asia in general. It is based on secondary data, collected from various published reports of international and national government- and private organisations, like WHO Covid-19 Global Data 2022. After 2019, the global economy has slowed down amid unmarked pressure from Covid-19 variants. There is a rise in inflation, debt, and income inequality that is imperilling the recovery. Since the 2000s, India had made remarkable progress in reducing absolute poverty. Between 2011 and 2015, more than 90 million people were lifted out of extreme poverty. However, the Covid-19 pandemic led India's economy into a contraction of 7.3 percent in year 2020-21. The 2016-17 Economic Survey of India had predicted the Indian economy to grow in the range of 7-7.75 percent. If we find the average annual economic growth of India before Covid-19, it registered a growth of 8.5 percent. In South Asia, a majority of the population is either self-employed or engaged in agricultural and related activities. Service and industry sectors are other major employers in the region, while micro, small and medium enterprises and the informal sector services engage significant numbers. The massive hit of Covid-19 on the global labour working hours came down to 8.8 percent in the 2020, it is equivalent to 255 full time jobs loss compare with 2019. The huge loss from the pandemic is four times greater than that of the 2009 world financial crisis. One pathway could lead to a prolonged, deep recession, exacerbated by closed borders and characterised by rising social tensions, vulnerabilities and a return to environmentally unsustainable development. The second pathway involves adopting globally and regionally coordinated policies that recognise the imperative of an inclusive, resilient and sustainable approach to development.

## **Governments should Focus on Deregulating Sectors on which People's Livelihoods Depend Analysing Individual Time Use Pattern and Determinants of Unpaid Work**

**Aastha**, Research Scholar, A N Sinha Institute of Social Studies, Patna, Bihar

Persistent gender inequality in unpaid work is a global phenomenon. Traditional gender roles burden women with household work. Evidence reveals that in the Asia and Pacific regions, women's working hours are the longest in the world. In these regions, women's average daily working hours are 7.7 hours, out of which 4.4 hours are devoted to unpaid care work. Unpaid work namely, domestic services, caregiving services to children, the elderly and the disabled are generally performed by women in households. Though these works contribute to the overall well-being at the household level, these services have remained unrecognised. Standard measures of economic activity do not consider services provided by women within a household.

The aim of this paper is to analyse the time-use pattern of men and women in India and also examine the factors which affect women's participation in unpaid work. For this purpose, unit-level data of the Indian Time-use Survey 2019 has been used in this study. In order to explore the factors affecting unpaid work, the OLS regression model has been used. Major findings of this study show that both in urban and rural areas, women spend more time on unpaid work and less time in paid work compared to their male counterparts. Gender plays an important role in determining unpaid work. Besides, the sector, age, level of education, marital status and employment status of caregivers are the major determinants of unpaid work. The study concludes that unpaid work is a multi-tasking phenomenon and women spend a larger share of their total time in unpaid work than male members.

## **Determinants of Informal Workers' Readiness to Transition towards Formal Economy: Empirical Evidence from Nepal**

**Sushanta Kumar Mahapatra**, Associate Professor, Department of Economics, IBS Hyderabad, IFHE Deemed University, Hyderabad, Telangana

**Preeti Gupta**, Researcher, Quest International College, Pokhara University, Lalitpur, Nepal

**Niranjan Devkota**, Researcher, Quest International College, Pokhara University, Lalitpur, Nepal

**Udaya Raj Paudel**, Researcher, Quest International College, Pokhara University, Lalitpur, Nepal

Formal economy is diversified set of economic activities, enterprises jobs and workers that are regulated and protected by states. Workers in formal economy has organized system of employment with clear written rules and recruitments, agreement and job responsibilities. This relationship is long run and maintain through the formal contracts. From the government perspective formal sector poses security, business certainty, maintain proper record system, easy to handle and monitored with minimal efforts, countries around the world prefer formal economy to prevail in their territory. From economic point of view, as government can increase the tax base by incorporating many new enterprises and small

business to its tax system; and regulate tax system to the sector any government want to want informal economy to enter into formal economy. Despite it is undesired, informal sector plays key roles in almost all the economy, in Nepal informal economy accounts for over 70 percent of the economically active population. Being informal is not easy, as workers are prone to violence and are stripped of many of the fundamental rights at work. Also, workers are particularly vulnerable to exploitation, lack representation and voice, and inadequate protection from income loss during sickness, disability and old age. It is the potential threat to the workers involved in an informal economy. Further, informal staff in the majority is deprived of secure work, edges for staff such as pension fund and treatment, social protection and illustration or voice. Increasingly, transition to formality has emerged as a priority policy agenda in developed and developing countries, and new policy initiatives and approaches are taken in different regions that facilitate this transition through multiple pathways. Despite of several talks, informal sectors related study is always demanding and trying to create new avenues to integrate the sector towards formal sector. For this, proper assessment is required that helps to explore the entrepreneurs engaged in informal business sector to move in formal business sector. In this light, this study aims to analyze the readiness of informal business sectors towards formal business sectors in Kathmandu valley. The study adopted analytical research design where 400 respondents were sampled from workers of informal sectors in Kathmandu valley. The structured questionnaire was used for data collection. This study uses a binary logistic model to visualize shift to formal from informal sector. Readiness Index considering legal and policy framework, Socio-economic status, employment status, structuralism status, and income status were analyzed to see whether workers from informal sectors are ready to move towards formal sector. Our result indicates business owners in informal sectors are ready to transfer to formal sector. The regression result indicates that informal workers level of education, marital status and work experience are positively associated with their readiness to transition towards formal economy. On the other hand, income earning status is found to be negatively associated with transition towards formal economy, meaning that informal workers have lower probability of transition towards formal economy if their income level is sufficiently high from the involvement in informal sector activities. The implication of the findings of this study was vocational training and development should be formalized; insurance, security maintenance, legal policy, etc. should be carried for managing informal economy. Differentiating income of both workers is another appropriate policy to shift informal workers towards formal sector.

## Peace, Terrorism and Corruption for Sustainable Development in SAARC Countries: An Application of Toda-Yamamoto Approach

**Subrata Roy**, Associate Professor, Mahatma Gandhi Central University, Motihari, Bihar

**Ravish Chandra Verma**, Assistant Professor, Mahatma Gandhi Central University, Motihari, Bihar

The present study tries to examine the co-integration relationship between sustainable economic growth and the selected macro-economic variables (GDP & Peace, Terrorism & Corruption) over a period from 2008 to 2021 by considering quarterly log data of the SAARC countries. The study applies ARDL-ECM bound testing approach for co-integration and Toda-Yamamoto Granger non-causality test for establishing direction of causality. Here, the variables are co-integrated with  $I(0)$  and  $I(1)$  forms and most of the variables are stationary at their first differences. It is observed from the ARDL bound testing approach that co-integration relationship exists in Srilanka only and the outcome of India is inconclusive. ARDL-ECM approach confirms about presence of long-run relationship between sustainable economic development and the macro-economic variables in India and Srilanka only. But, there is little evidence of short-run relationship among the macro-economic variables in India, Pakistan and Srilanka. The ARDL-ECM approach of few countries experience structural break for a short period of time.

It is observed from the above discussion that the quarterly logarithmic data of the macro-economic variables in few cases are normally distributed and in some cases not normally distributed. There is a mixture of distributions. Similarly few variables are stationary at level but most of them are stationary after first differences and the variables are co-integrated at  $I(0)$  and  $I(1)$  forms with optimum lag length one. But when ARDL bound testing approach is applied for establishing co-integration then the outcome of India is inconclusive. However, long-run equilibrium relationship exists in India and Srilanka when sustainable economic growth (GDP) is considered as dependent variable. Moreover, short-run equilibrium association exists between sustainable economic development and some of the macro economic variables in India, Pakistan and Srilanka. It is also observed from the Toda-Yamamoto Granger non-causality test that uni-directional causality exists between few of the macro-economic variables in Afghanistan, India and Pakistan. Here, the residual tests confirm about validity of the ARDL-ECM model. However, CUSUM test indicates presence of structural break of the ARDL-ECM model of Afghanistan, Nepal and Srilanka. Although, the structural break occurs during 2020 in Afghanistan but thereafter there is no structural break. Similarly in Nepal the structural break happens during 2015 and 2016 and after that it is absent and in case of Srilanka, the structural break arises during 2016 and 2017 and afterwards there is absence of structural breaks in the ARDL-ECM model but in other cases the model is stable. The study reveals many issues like positive relationship between sustainable economic growth and corruption in India in the long-run. Which tells about that sustainable economic development is increased with the enhancement of corruption. So, these two macro-economic variables increase simultaneously. Here the Government should take necessary measures to stop corruption by which sustainable economic development can reach at an expected level. Similarly, in short-run, the relationship between sustainable economic development and

terrorism is also positive in India. Here, the terrorism activities are confined into short-run. Here, the Government will take necessary actions to stop terrorism activities. Only, the Srilankan Government takes necessary measures for the sustainable development of economy with utmost care on human peace with prevention of terrorism activities in the country in the long-run as well as short-run. Moreover, in short-run Pakistan is affected by terrorism and corruption activities which also influence positively to the sustainable economic development. So, here, the Pakistan Government should take appropriate measures to reduce these two activities in the society by which human peace is increased with the enhancement of sustainable and reliable economic growth. So, it may be opined that the outcomes of this paper will be helpful to the policy maker, government and researcher to look on this issue critically to frame more advanced techniques, policy framework and the way of further research.

### **Role of Flag State in Protecting Abandoned Seafarers: Study in the Light of Maritime Labour Convention, 2006 and Domestic Laws of India**

**Mohit Gupta**, Research Scholar, GNLU, Lucknow, Uttar Pradesh

**S. Shanthakumar**, Professor, GNLU, Lucknow, Uttar Pradesh

Seafarers render a laudable service to humanity by assisting in transporting cargo and passengers from one port to another. During the voyage, they face lots of challenges and difficulties. Abandonment of seafarers is one such challenge that is the focus of the present research. Abandonment broadly refers to a situation where the shipowner detaches all its connection from the seafarers on board his vessel and commits a serious violation of the employment contract by not paying the wages or denying the repatriation or necessities like food, water, etc. to the seafarer onboard vessel.

There are many reasons behind the abandonment of seafarers by the shipowner. One of the most common reasons is the poor financial condition of the shipowner, because of which the shipowner may become unable to continue day-to-day ship operations and maintain the seafarers.

As the problem of abandonment constantly persists in the shipping sector, and the time taken to resolve the situation is often very long, the present paper assesses the flag state's role in protecting abandoned seafarers. Under Maritime Labour Convention, 2006(MLC) flag state of the vessel is responsible for ensuring decent labour standards on its vessels. The present work will look at the scope of responsibilities upon flag state of the vessel in the seafarer abandonment situation in the light of MLC and how effectively India has discharged its obligations under MLC to protect abandoned seafarers on its flagged vesse

### **Migrants in the Megacity: COVID 19 and Compounded Informality in India**

**Shikha Silliman Bhattacharjee**, PhD Candidate, University of California, Berkeley, USA

In India, economic shocks brought on by COVID 19 precipitated a mass exodus of internal migrant workers from cities and production hubs. What were the underlying conditions that left internal

migrants with no wages, savings, or social safety net when COVID 19 struck, driving the worst domestic migration crisis since Partition in 1947? Drawing from ethnographic, interview, and survey research from the five years preceding the first wave of COVID 19 in 2020 and extending to April 2021, this paper explains the context that left millions of migrant workers with no alternative but to flee from the Delhi, National Capital Region (NCR) when the pandemic struck. It explains how spatially determined flexible planning and employment practices deregulate housing and work, paving the way for labour extraction at the base of global production networks, and in the construction and service sectors. At their intersection, flexible planning and employment produce zones of compounded informality—a term I introduce to demarcate the unregulated spaces wherein migrant workers are unable to access social democratic citizenship rights within their native country, tearing apart what remains for them of India’s social safety net. These zones of compounded informality—a byproduct of market driven development in the Delhi NCR—established the conditions for humanitarian crisis and mass reverse migration during the COVID 19 pandemic. Further attention to zones of compounded informality in the anthropology of migration stands to advance our understanding of the interaction between unregulated dimensions of the labour market and public sphere, and ongoing processes of deregulation—drawing together key insights from the anthropology of labour, the study of spatial governmentality in cities and production hubs, and legal anthropology. As described in this paper, the eclipse of the regulatory apparatus of the state in varied domains not only interacts to escalate the consequences of exclusions, but also to produce knock-on exclusions.



**TECHNICAL SESSION  
(BRIEF PRESENTATIONS-3)**



## **Impact of Rainwater Harvesting on Women Work Time Allocation: Evidences from Purulia District of West Bengal**

**Suchismita Mondal Sarkar**, Associate Professor, University of Burdwan, Burdwan, West Bengal

Rainwater harvesting (RWH) technology has emerged as the major engine of development in rain fed areas, for conserving natural resources and enhancing livelihoods of the inhabitants, while focusing on the socio-economic conditions of the resource poor especially women and the asset-less. Women are the key players within a household in managing the food security and nutritional goals with which comes the responsibility of collecting safe drinking water. It is the women who bear the burden of time in collecting water, at times from long distances. To combat the problem, Rain Water Harvesting Structures (RWHS) are being constructed under the Integrated Watershed Management Programme (IWMP) of the central government. The aim is to resolve the water needs and to support agricultural production, consequently enhancing people's economic and social well-being. This study intends to assess the impact of the rainwater harvesting projects with special reference to women, and thus endeavours to examine the impact on their work time allocation. Analysis was carried out using multiple regression analysis to quantify the results. The results reveal that the RWH technology is a women-friendly sustainable source of water supply and has the potential to resolve the water issues if effectively implemented.

## **Impact of Covid-19 on Income and Employment Pattern of Farmers and Labourers Class in India: An Empirical Study**

**Yasar Mehmood**, Research Scholar, Babasaheb Bhimrao Ambedkar University, Lucknow,  
Uttar Pradesh

**Pranav Kumar Anand**, Assistant Professor, Babasaheb Bhimrao Ambedkar University, Lucknow,  
Uttar Pradesh

The Covid-19 pandemic is one of the greatest global tragedies across the globe. It emerged and spread from Wuhan city of China and within few weeks spread in the whole world. The virus has spread widely, and the number of cases goes on increasing day by day, harming and hampering the life of everyone irrespective of their age, religion, sex, status, regions and race. This was actually an alarming situation for the whole world, putting the life of every individual in danger.

The policy implication from the above is that on a larger scale, crisis is there in agriculture, which has harvest low returns and declining incomes and profitability. Risk management in agriculture and farming would reap low yield, price, high rate of interest income, and weather-related to uncertainties among others. The employment opportunities become less available to the labour class, farmers and low-income groups, which adversely affect their life. Improving and increasing the water availability will facilitate diversification of cropping pattern, but this should go hand in hand with policy implications which increase non-farm income and employment. Improving agricultural extension which will boost the agricultural production and productivity at a considerable level through appropriate technical knowledge for alternative forms of cultivation such as organic farming, will be of help.

## **Telecommuting and Derogatory Ramifications**

**Simon Jacob C**, Asst. Professor, Rajagiri College of Social Sciences (Autonomous), Kochi, Kerala

Organisational support, environment, policies, culture and human resource management practices, all these areas were researched, analysed, studied and outcomes were put into practice by many organisations to keep the employees motivated so that they put forth their maximum performance. The workplace is a home away from home and all the organisational practices are aimed at maintaining a better environment at work the place. The importance of this approach cannot be undermined since many of the employees spend half of their time at their workplaces. Here comes the paradigm shift of the workplace to a 'virtual space', where employees can work by being away from the actual workplace, sitting at their own home. Telecommuting has become a usual practice nowadays, especially in a technologically driven work environment. Work from home has its advantages and disadvantages on many counts. This paper tries to analyse the effect of telecommuting on employee–organisation alienation by being away from organisations' dynamics. The consequences of extended working hours, overload and spill-over of interference work to family life and vice versa, result in work-family life conflict and social isolation. They are also being considered important HR issues, affecting the productivity of employees. This may also result in a lack of innovation and creativity. Cost-quality concerns of management practices ensuing, gaining and maintaining competitive advantage resulting from having the right personnel in the organisation cannot be ignored by any organisation.

Due to the badly being hit by the Covid-19, the affected labour economies have explored the new model of work from home. This arrangement is there to continue as new normal in the days to come. The exploratory journey to identify the unfavourable outcomes of telecommuting, which is the need of the hour to enhance employees' performance to reap reasonable output in this work arrangement.

### **The Value of 'Un-Productivity': A Study of Indian Homemakers**

**Khushi Koul**, Student, Shri Ram College of Commerce, Gurgaon, Haryana

**Svetlana Sehgal**, Student, Shri Ram College of Commerce, Gurgaon, Haryana

**Navya Kataria**, Student, Shri Ram College of Commerce, Gurgaon, Haryana

This paper investigates factors impacting an Indian homemakers' contribution to productive work in an economy and define in economic terms. Two contrasting methodologies are deployed to calculate the value of unpaid work, i.e., Opportunity Cost Method and Replacement Cost Method. The context is the urban middle-class homemakers residing in certain areas of Delhi NCR. For this purpose, a random sample of 26 women is drawn and interviewed. The sample is divided into two groups, i.e., women who have never entered the labour force and women who have entered the labour force in the past.

The age-old debate about providing homemakers' defined pay centres around two opposite opinions: one claims that the services not exchanged on the market are therefore counted to be not

“productive”, and the other claims that even though housework is unpaid, the contributions of a housewife are extremely valuable. The latter also often believes that being a homemaker undermines a woman’s worth in some cases, and a lack of pay extends the idea that women should sacrifice their education and careers to nurture future generations. The economic argument in favour is that the inclusion of their work in the GDP would, in turn, boost it substantially. It is also a common practice to burden women with dual roles of economic earning and undertaking unpaid household chores, of which men do a very tiny fraction despite the benefits they derive from it.

As a result, often, especially in cases of the death of a housewife, witnesses and juries admit that even when women do not step outside the house to trade their services, they have an inherent value to the household despite not being tangible. There is an Indian Supreme Court Ruling that increased the compensation from an insurance company to the relatives of a deceased couple, by accounting for the value of the woman’s work done at home. In this case, compensation was increased by rupees 11.20 lakh, an amount supposed to represent her entire life’s worth of work. This was a one-off case: In December 2014, the widower of a 31-year-old woman, when demanded compensation but only received a recurring amount of Rs. 1,250 as decided by a Tamil Nadu tribunal. The woman left a 5-year-old daughter behind. Multiple such cases highlight that a woman’s contribution as a homemaker is not recognised enough, since it is not primarily given the spotlight while they are alive. So, if the women who choose to stay at home and contribute to the convenience of other economic contributors are not recognised for their impact, how miscalculated is productivity as a whole?

Historically, different approaches across studies in various nations have been used to calculate the value of unpaid work. Rosen in 1974 proposed to find a substitute mother on the market who does the same set of jobs as a homemaker and then find out what wage rate is determined for this worker competitively. This is referred to as General Replacement Cost Approach.

An alternative method called the opportunity cost method values the homemaker’s time by calculating the wage that she forgoes for staying at home. It represents the opportunity cost of not working in the labour market, conditional on their level of education and prior experience.

We hypothesise that the Opportunity Cost Method would be apt for women who had entered the labour force market before and lost the opportunity now by opting to stay at home, as opposed to the replacement cost method to compensate women who do not have prior experience in the labour market. The paper finds that the Replacement Cost Method compensates more for both groups of women. Nevertheless, the limitations of each approach are recognised and how taking a better approximation of the Indian wages for domestic chores might give different results.

## **An Assessment of the Impact of Industry 4.0 Technological Advances on Employment in India**

**Amita Dharmadhikary Yadwadkar**, Assistant Professor, Department of Economics, Savitribai Phule Pune University, Pune, Maharashtra

**Ashwini Pathak**, PhD Research Scholar, Department of Economics, Savitribai Phule Pune University, Pune, Maharashtra

In this paper, we have attempted to examine the issue of the impact of adoption of Technology 4.0 on the employment level in the Indian industry/economy. We also tried to conceptualise the possible favourable and adverse impacts of industry 4.0 on employment in various sectors. The survey of literature has shown that in the immediate future the impact will be minimal and limited to a few pockets, and these indications are seen in the ILO's 2018 report as well. We also find that there are both direct and indirect costs associated with implementation of Technology 4.0. The direct costs constitute the capital investments undertaken to implement these technologies, while indirect costs are the cost of labour displaced. The indirect costs can be in the form of form of retrenchment pay, reskilling of labour and the loss in the production, if any, due to these.

The successful adoption and implementation of 4.0-IR technologies in a labour surplus country needs careful consideration. Capital surplus, labour scarce economies may have a certain compulsion to adopt these technologies. The Indian economy is characterised by surplus labour, small and medium scale enterprises and capital scarcity; wherein the adoption of these new technologies may not be all pervasive. They may get adapted by few large-scale and capital-intensive firms only. Even if these technologies are adapted by small and medium scale firms, the impact of this may not be large enough to displace labour and create unemployment.

## **An Empirical Study of International Youth Migration: A Push-Pull-Mooring Model**

**Prabhjot Kaur**, Research Scholar, Punjab School of Economics, Guru Nanak Dev University, Amritsar, Amritsar, Punjab

**Amanpreet Kaur**, Assistant Professor, Punjab School of Economics, Guru Nanak Dev University, Amritsar, Punjab

Punjab has lost its supremacy in the agriculture sector, with its farmers in severe distress and stagnating growth. An important reason behind these disturbing trends is that the youth of Punjab has been shying away from agriculture for a long time and migrating to foreign nations in unprecedented numbers. It has become critical to precisely investigate the drivers of youth migration, namely the push and pull factors for effectively addressing this phenomenon. From the literature review, emerging push-pull-mooring factors other than the traditional ones are identified, and their impact is examined on the migration intentions of youth. The study is based on the data collected from 367 respondents aged 18-35 years residing in three districts Gurdaspur, Hoshiarpur, and Ludhiana. The questionnaire

comprised 21 purposeful statements focused on the seven constructs-disinterest in farming, political instability, social values, behavioural beliefs, switching cost, subjective norms, and migration intentions, and questions relating to the demographic profile of the respondents. The constructs are measured on a seven-point Likert scale. Indicator loadings confirmed the model's validity and Average Variance Extracted (AVE). The reliability or internal consistency of the model is confirmed with Composite Reliability (CR) and Cronbach's Alpha.

The assessment of the path coefficients exhibited that disinterest in farming is a significant push factor significantly affecting the migration intentions. Additionally, political instability was also significant on migration intentions signaling that the youth are being pushed abroad by corrupt practices, favouritism, and uncertainty on the political front. Further, in consonance with the theory of planned behaviour, behavioural beliefs substantially influence the intentions of youth to migrate. Behavioural beliefs of youth like foreign nations offer better-paying jobs, superior standard of living, and education avenues positively impact the migration intentions. Social values like a safe and secure environment, a less corrupt system, and acceptance of all types of jobs significantly affect the migration intentions of the youth. Thus, behavioural beliefs and social values emerge to be key pull factors.

Further, the perception of the youth that the switching cost, namely the visa conditions, travel expenses, expenses relating to education and living, has a consequential effect on intentions to migrate. Higher the switching cost, less intense will be the migration intentions. Besides switching subjective cost norms, the other mooring factor significantly impacts migration intentions. The model provides the  $R^2$  value of 0.742, implying that independent variables substantially explain variance in the dependent variable. The measures of model fit like Standardized Root Mean Square Residual (SRMR),  $d_{ULS}$ ,  $d_G$ , and Normal Fit Index (NFI) reveal that the model is a good fit. Based on its findings, the study draws important policy implications such as the need to make farming a respectable, remunerative, advanced, and challenging profession to retain youth. Developing a politically stable and corruption-free environment with equal opportunities for everyone is the need of the hour. The infrastructure and value system similar to foreign nations have to be created in India to keep our precious youth and their potential. Losing it would mean a loss of the golden future of India.

### **MOOC for Person with Disabilities Building Creative Workplace**

**Shipra Sharma**, Research Scholar, GGSIP University, Delhi

**Shalini Garg**, Professor, GGSIP University, Delhi

Creative Industry have been allied with Creativity and Innovation which has evolved from cultural industries. Innovation entails to view things differently and empower individuals to feel autonomy and facilitate artistic collaboration between employees with or without disabilities. It investigates the notion that every individual is the source of ideas that will lead to innovative and creative organisations. Innovations and creativity in learning technologies are fostering the organisations to build inclusive and accessible workforce to attain competitive edge. This paper thereby tends to explore inclusive workplace with respect to people with disabilities. The research has been complete in two stages, using a

focus-interview approach. The responses were collected from employees with disabilities, employed in Hospitality Sector. During the first phase, the employees with disabilities were introduced to traditional training sessions and at the completion of training sessions their feedback was recorded. Supervisors, employees with disabilities and course-developers, being the exclusive members of the enterprise, their feedback was also recorded. During the second stage, the employees with disabilities were introduced to MOOC e-content and again their feedback was recorded. This paper has tried to demonstrate whether the MOOC platform transforms conventional workplace into culturally inclusive workplace.

### **Organisational HRM Practices: Opportunities and Challenges in Pandemic**

**Punam Agrawal**, Research, USMS, GGSIPU, Delhi

**Shalini Garg**, Professor, USMS, GGSIPU, Delhi

The current Covid-19 was originated from Wuhan city of China in December 2019. The Covid-19 has spread around the globe and has shaken the world vigorously, and has created a high level of insecurity and fear among the business organisation, employees, societies, and ordinary people. The business leaders, organisation, and management are facing new challenges due to Covid-19.

The Covid-19 harms economic, it has created natural disasters. The companies worldwide have implemented different “non- pharmaceutical “methods to stop the spread of the virus. The lockdown was imposed, people were quarantined, school and universities were closed, traveling was restricted, massive public gathering was prohibited, the flights were cancelled, non-essential related business organisations and the other no- governmental organisations were temporarily closed. Covid-19 has slowed down the economy of the country around the world (Brodeur, Gray, Islam, & Bhuiyan, 2021).

The purpose of the study is to examine the opportunities and challenges of the (COVID-19) pandemic situation concerning HRM Practices. The HRM practices are also impacted due to Covid-19. The employees are working remotely or doing work from home due to the pandemic situation. The study is conceptual, and it presents the challenges and opportunities of the pandemic on HRM practices, including Recruitment, Selection, Training and Development, and staffing.

Pandemic has brought new changes in the business organisation and in the process of recruitment. The recruitment process has expanded its area from the one region to the around the globe, with the help of development in information and communication technology. Business organisation does not require performing its process from the small radius within the organisation or forming the metropolitan offices. The organisation can employ the individuals with disabilities or who are not able to travel (Open Access Government, 2021). Today more and more business organisations are going virtual. There is a shift in recruitment, attracting the individual’s candidate, talent pool within the organisation; there is more focus towards equality and inclusion. There is more focus on diversity in the business organisation. The pandemic has brought a huge change in the business organisation. It has given opportunities to business organisation. The organisations have become a change agent and the recruitment is now done of remote work force.

Technology has enabled remote-work, it has possible the communication and continue learning in unique scale. The technology has made possible to train the employees and provides the material for training depending on the demand from anywhere using various methods.

Staffing can be defined as of process where the employers attract, select and retain the individual who are competent in order to achieve the goal of the organisation. The staffing has been impacted by the covid-19 and has reshaped the changing business environment.

In the current situation of crisis, it is important for the organisation to be more concerned towards their employees in financial or non-financial compensation and help in order to sustain and improve the performance of the employees (Sembiring et al., 2020).

The new performance management requires being more adaptive in nature; it should be collaborative in order to face the challenges of the pandemic situation.

Due to the pandemic situation, almost every work has been shifted to virtual mode. HRM practices have become digitalised. The work from home has become normal today. As in the current situation it's difficult to interact and socialised in physical presence online platform is the best way to interact and get the job done. The digital technology has made the life comfortable. But along with making the job easy the work from home has created various challenges. The organisation needs to motivate the employees time and again to sustain in the organisation. Today the human resource managers have to motivate the employees to help them in managing the personal and the professional lives. In the situation of crisis, a new and unexpected opportunity is created for the organisation.

Traditional HR practices and systems, such as, recruitment, training and development, staffing, performance management, compensation were done with close monitoring and control of employee behaviour. In today's pandemic and changing environment it might not be possible. Today all the HRM practices are not performed within the small radius of their typically metropolitan offices. Pandemic situation has created challenges as well as opportunities to the employers and employees. A new strategic and practices of it is required to achieve greater level of effort, motivation, and commitment of the employees in order to sustain and perform the job.

### **An Analysis of Contribution made by Self-help Groups in the Development of Rural Areas with Reference to Deen Dayal Antyodaya Yojana – National Rural Livelihood Mission (DAY-NRLM)**

**Ravi Kumar Gupta**, Assistant Professor, Madan Mohan Malaviya University of Technology,  
Gorakhpur, Uttar Pradesh.

**Udit Maheshwari**, Research Assistant, Madan Mohan Malaviya University of Technology,  
Gorakhpur, Uttar Pradesh

Rural areas are the regions deprived of very basic facilities such as poor level of employment opportunities, low level of education, low level of skills, dearth of institutional credit facilities, marking facilities, enough knowledge about business and the required infrastructure. To tackle these problems

at the grass-root level Indian government launched Swarnjayanti Gram Swarozgar Yojana in the year 1999 and which transformed into National Rural Livelihood Mission in the year 2011 and again the name of this scheme changed into Deendayal Antyodaya Yojana - National Rural Livelihood Mission in the year 2015, this scheme was introduced to combat rural poverty among rural poor people. This programme has given a special role to Self Help Groups (SHGs) which aims to organize the rural poor people and pool their savings for fulfilling the objective of the group. Self Help Groups help the rural people by providing them with a platform to learn, engage, institutional credit support and conduct business activities which will create some income-generating assets and ultimately help them to leap out of poverty. This scheme is also contributing to rural development as it will impart training to rural poor people who will directly contribute towards the development of the rural economy, rural empowerment will also help in the development of rural areas as the rural people will now be able to utilize local resources and make it more economically viable. The SHGs will help members to establish small businesses with credit facilities and will also provide expert advice on the required matters. The beneficiaries will be given the training required to conduct any business such as bookkeeping knowledge and about the management of finance. This scheme will provide support to beneficiaries since the inception of their small business, training and other things required to conduct and manage the business efficiently and effectively and this scheme has also a provision of providing support of marketing services to the new and established businesses. This scheme will provide a concrete platform for rural women to live a better life from an economic and social perspective. This research study is based on secondary data obtained from various research papers, reports of government institutions and a book. The findings indicated that the number of SHGs applying for institutional credit increased since the beginning of this scheme year to year, which is making it inevitable for rural people to combat poverty and also amount allocated to SHGs for business activities has also increased with tremendous growth. The results also stated that the number of SHGs availing loans out of the total number of SHGs in every year has seen a rise since the year 2011-12 to 2018-19. This scheme is also contributing towards the overall holistic development of rural regions by providing rural poor women with a source of stable income source and income-generating assets, which will contribute explicitly or implicitly to better education for their children, better standard of living, nutritious diet, etc.

### **Impact of Healthcare Expenditure and Health Infrastructure on Health Outcomes (Non-Communicable Diseases and Maternal, Neonatal and Nutritional Diseases) among the States and Union Territories in India**

**Sridevi Manchala**, Senior Research Fellow of ICSSR, Centre for Economic and Social Studies, Hyderabad, Telangana

**Khadar Babu Ch.** Consultant, ICMR-National Institute of Nutrition, Secunderabad, Telangana

Good health plays a substantial role in economic growth. However, globally 41 million people (71%) die annually from non-communicable diseases (NCDs), representing a huge disease burden. India with a population of 1.3 billion in 29 states and seven union territories, varies widely in terms of

their ecology, economy, and demography. The burden of health problems vary across the states, undergoing a major epidemiological transition, as mortality due to communicable, maternal, neonatal and nutritional diseases (CMNNDs) has declined substantially and life expectancy improving, while NCDs and injuries are increasing. Health affects economic growth directly through labor productivity and the economic burden of illnesses, and indirectly affects the future income of people through the impact health has on child education due to illness.

An attempt is made to examine the disease burden and risk factors trends in each state of India. This study is based on secondary data obtained from health repository of WHO, various government reports, and journal articles. The growth rates are estimated and linear regression is modelled to examine the trends of NCDs and CMNNDs during the period of study; and examine the association between healthcare expenditure and health infrastructure with death rates and DALYs rate for the causes of diseases among each state and union territory. Standardized methods like regression and correlation is done to compute the estimates.

The study finds that among NCDs, cardio vascular diseases (CVDs) contributed to the highest number of deaths (2.6million) followed by COPD at 1 million in 2016 in India. Deaths due to diabetes increased substantially by 69%, CVDs and cancers by 5% and 9% respectively, but COPD declined by nearly 23.6%. The highest number of deaths were attributed to CVDs and lowest to COPD. The current health expenditure per capita is the lowest in India, when compared to other BRICS countries, which increased from US\$ 18.6 to US\$ 69.3 during the period 2000 and 2016.

State-wise analysis of the per capita health expenditure, health infrastructure, prevalence of NCDs and CMNNDs is yet to be done.

This study tries to underscore the importance of healthcare infrastructure and government health expenditure and its implications on the death rate due to NCDs and CMNNDs among the states and union territories in India. This study emphasizes that with huge loss of lives in their productive age groups (30-69yr), many affected families are pushed into poverty leading to huge loss to the economy. Hence improving health infrastructure, and healthcare expenditure along with more awareness on the importance of healthy foods, and physical activity would pave the way to saving lives in their productive age groups, which would prevent the loss of productive labour to the economy.

### **Academic Entitlement, Learning Engagement and Mediating Role of Incivility**

**Swati Chaudhary**, Research Scholar, Gurukul Kangri University, Haridwar, Uttarakhand

In this study impact of academic entitlement on incivility and learning engagement was examined. The mediating role of incivility in the relationship of academic entitlement and learning engagement. Data were collected from 628 undergraduate and post graduate students through a structured questionnaire. We examined whether AE reduces learning engagement and how incivility mediates these relationships. Four hypotheses were put forward, and all were supported. The empirical results show that both AE and incivility reduced learning engagement.

We make several contributions to the literature. First, the current study adds to the body of knowledge on academic environment. Because the majority of the literature in this subject comes from Europe and America, despite its few limitations, the current study highlighted the mediating effects of incivility in the links between AE and learner engagement. Second, it attempted to add to the little research on the links between AE, incivility and learning engagement. It is the first study to examine the influence of AE on uncivil behaviour and student's learning engagement.

According to the findings of this study and studies conducted by Kopp and colleagues (2011), AE could provide serious challenges to higher education. External locus of control, job avoidance, putting up less effort on tests, and being less focused on acquiring topics are just a few of the maladaptive features linked to AE (Kopp et al., 2011). As a result, university administrators and teachers may devote an excessive amount of time and resources to dealing with AE students. The makeup assessment sessions for noncompliant students, for example, demand for a significant amount of additional resources and effort. Educators may have to spend time and effort dealing with students who refuse to come to class or finish their assignments on time. Thus, reducing AE and uncivil student behaviour is important for university functioning.

Although AE is difficult to alter, college officials can mitigate its impacts. This could be accomplished by providing students and their guardians with a predetermined handbook of evaluation criteria (such as minimum attendance, minimum passing marks, and so on) at the time of enrolment. So that they don't seek for excessive benefits.

Also, Incivility emerged to have a significant mediating effect in the relationship between AE on Learning Engagement. Because AE attitudes are largely stable beliefs that are less receptive to modification, we recommend using behavioural modification strategies to reduce uncivil behaviours (e.g., class rules regarding uncivil behaviours could be specified in the course syllabus and consistently enforced). Given that civility can be learned, organisations may wish to offer a civility course or regular civility classes to students in higher education. Civility classes may improve the student's behaviour and ability to learn.

### **An Assessment of Socio-economic Vulnerability of “Bhojan Matas”: A Case Study Analysis**

**Pooja Bhandari**, Assistant Professor, Govt P.G. College New Tehri, Uttarakhand

The paper attempts to study the role played by cook cum helpers as the front line workers in making the MDM scheme, now known as the PM-Poshan Scheme successful in providing nutritional security to the children of the nation. It uses a case study analysis to study the socio-economic condition of these workers and how the pandemic induced lockdowns have influenced their working conditions and remuneration. It draws the attention of the academia towards them so that they are able to become part of the labor market of the economy and avail the accruing benefits.

The responses from these cook cum helpers working in different government primary schools of cluster Nagal Hatnala in Raipur block gives an insight into the situation of these workers. It draws the

attention of the academia towards this group of people which are rendering their services in schools at sub-nominal rates. They belong to economically and socially disadvantaged groups of the society and almost all of them are women as the only earning member of the household. The bhojan matas still seemed satisfied as they receive their payments timely and were paid even during the pandemic induced lockdown which increased their job security to a great extent. Though this study does not establish any causal relationship or quantitatively equipped to draw inferences but it does encourage research related to the working conditions and services of the bhojan matas. These workers ended up in these jobs because of their poverty and not out of any intention to provide social service. The nature of their job has also changed which requires training. Thus, these issues must be addressed so that the CCHs can be driven out from disguised unemployment and provide them sustainable livelihood opportunities.

### **The Retirement Confidence Model in the Context of Changing Socio-economic Dimensions in India**

**Neha Mangla**, Research Scholar, Amity University, Noida, Uttar Pradesh

**Kavita Indapurkar**, Professor and Joint Administrator, Amity School of Economics,  
Amity University, Noida, Uttar Pradesh

Self-sufficiency in terms of wealth and happiness can sum up the success of individuals during retirement. A successful retirement is a long-term process that requires rightly perceiving one's retirement days, planning for them and putting those plans into action in a timely way. Generally, people who prepare well for their retirement financially, have more positive attitudes towards their retirement. However, some people feel optimistic about their retirement despite planning and saving inadequately. Therefore, there are many other important factors along with retirement planning that define and build retirement confidence. As per the UN projections, given the reduction in mortality rates and the resulting increase in life expectancy, by 2050, 21% of the population in India will move to the 60+ age group. Hence, it is imperative to understand the dynamics behind building retirement confidence at this stage when majority of the population in India is still young, so that a confident retirement is ensured for the aging Indian population. Saving and planning for retirement is more challenging as it involves foreseeing rightly the needs and requirements that might arise in the far future ahead. There is a lot of heterogeneity in individuals' perception about their retirement and the transition into retirement. Through extensive review of past research and author's own hypothesis, the paper puts together a theoretical model to analyse retirement confidence in India. Not just retirement planning but other social (e.g., family dynamics, migration of young generation), economic (e.g., inflation, economic shocks like the ongoing Pandemic), psychological (e.g., idea and perception about retirement) and behavioural factors (e.g., personal control, risk aversion) determine the perceived self-confidence of individuals for their retirement days. The study will help identify research gaps and provide opportunities for further research to address and implement policies to ensure a confident retirement for the current working population in India.

## **MGNREGA: Strong Evidence of Down Economy during Pandemic**

**Ranchhod Gagal**, Assistant Professor, Government Arts and Commerce College, Rapar, Gujarat

There is a need for employment programs when a certain section of the society has no option for income generation. Under MGNREGA scheme on-demand work is given by the gram panchayat on request for maximum 100 days in a year.

MGNREGA is unlikely to have a significant impact on the country's growth or development in the terms of wage rates or the way it provides employment. So that, in it is unlikely to increase purchasing power and create demand in economy through generate revenue but, for persons/households who have no income source, MGNREGA is important as a livelihood.

Due to industrialization and rapid urbanization, most of the migration of workers is from rural to urban areas; High wages in urban areas attract rural workers. This process has been going on continuously. But in the year 2020, due to the Covid-19 pandemic, there was a lockdown in the entire world, so the economic activities are stopped. A similar situation in India were affected the economic and social life of the people. In particular, unorganized sector workers were severely affected. Workers lost their jobs and street vendors and small traders lost their livelihoods. In this situation a return migration of workers was seen. The reason for the return migration was not only the loss of employment but also the neglect of basic facilities like, residential and foods by the industrial units. In India, social security for workers is always neglected in the unorganized sector employers. In rural areas, the agriculture sector already had low wages, high unemployment and limited employment sources. Lockdown and return migration has increased the burden of labors on limited income sources of rural India.

The Covid-19 pandemic proved that MGNREGA is a source of employment only during times when there is no employment elsewhere. This paper seeks to test how MGNREGA can be seen as strong evidence of a sluggish economy during the Covid-19 epidemic. The paper presents a comparative analysis of the last five years, based on MGNREGA reports and data from seven states. The seven states are Bihar, Uttar Pradesh, Chhattisgarh, Odisha, Madhya Pradesh, Jharkhand and Rajasthan. MNREGA is seen as an indicator that the economy was sluggish during the epidemic.

## **Fisheries Farmers' Social Securities: India and the States**

**R Sathishkumar**, Ph. D. Research Scholar, Alagappa University, Karaikudi, Tamil Nadu

**K. Ramesh Kumar**, Assistant Professor, Alagappa University, Karaikudi, Tamil Nadu

This paper examines the dimensions of agriculture sector including fishing sector. Fishery sector is one of the prominent sectors of the state which generates a huge income and employment opportunities. Moreover, fish farming has always been one of the common activities in the rural areas of some states. The main objectives of this paper are to understand the importance of the fisheries sector, to ascertain

the rural wage rate in fishing sector and other sectors from 2015-2020, and to study the prevalence of social security of the fisheries sector at national and sub national levels. This paper has made an attempt to explore social security measures in the fishery sector of all the Indian. It considers fishermen population, fishermen engaged in Marine Fisheries activities, fishery resources, social security measures under the blue revolution sanctioned fishermen community between the year 2015-16 and 2019-20, and also suggests some social security measures for the upliftment of fishery sector.

### **The Rise of the Gig Economy & the Quest for ‘Decent’ Work: A Qualitative Study of App-based Cab Drivers in Chandigarh Tri-city Region**

**Subhashri Sarkar**, Research Scholar, IISER-Mohali, Mohali, Punjab

Gig Economy platforms are effectively channelling into India’s informal & social economies at a time when the push to move from informal to formal sector is gathering pace. According to the Economic Survey 2020-2021, expanding gig economy platforms have emerged as enablers of employment creation and have made India one of the largest countries for flexi-staffing in the world. Many scholars argue that with the rise of gig economy platforms there is the decline of standard work arrangement with the shift from close to open employment, loss of direct employer-employee relationship and disappearance of secured full-time regular work with benefits at a living wage. Temporary work, subcontracting & outsourcing has long been underway. The effect is commodified labour time and has also dis-embedded workers from social protection. Though job-creation should occupy a central place in development strategies for poverty reduction and economic growth but at the same time, qualitative dimensions of employment need to be addressed.

Using narratives of app-based cab drivers in the Chandigarh Tri-city region, the paper argues that gig economy platforms are like informal labour hubs and can be imagined as ‘virtual labour hubs’ without any social safety net and embedded with flexible labour relations. The paper throws light on app-based drivers’ needs, circumstances & aspirations and also provides helpful recommendations to create ‘decent work’ for app-based workers. The gig economy is perceived to be the future of work so there is a strong need to prioritize the labour right of gig workers. Digital platforms should provide productive, meaningful & ‘decent’ work so that it enables workers to shape their lives better. Their business conduct should not be always motivated by profit and ensure accountability as well as transparency of algorithms through algorithmic audits or impact assessments. Also, there is a dire need for building solidarity among workers through the representation of gig workers in unions and labour market institutions as well as providing an adequate safety net for gig workers. Government platforms can play an important role in launching their own apps by taking into consideration the demands and aspirations of both riders and drivers to avoid the pitfalls of the current platforms.

The paper also highlights that the key issue is to find the right balance between regulation and overregulation to ensure a ‘social dialogue’ between relevant parties. Gig economy platforms can play an important role by providing productive, meaningful & ‘decent work.’ There is a need to strike a balance between gig workers’ rights and the simultaneous development of gig economy platforms.

## **An Assessment of India's Inclusive Growth Strategy on Economic Upliftment of Tea Garden Labourers of Assam – A Study in Charaideo District of Assam**

**Sumit Dey**, Assistant Professor, B.N. College, Dhubri, Assam

Tea garden labourers ever since its inception in Assam in early 19th century, are facing critical problems of low wages, poor housing, illiteracy and acute poverty. Although after independence the condition of the tea garden estates began to improve slightly but it was at a very slow pace, which actually couldn't target the huge population of this community. The tea garden labour lines often known as coolie lines in Assam, have unique identity of poor housing and sanitation facilities, lack of safe drinking water facilities, high rates of malnutrition, widespread locally made alcohols, worm infestation, illiteracy among the adult members, and different types of superstitions. Therefore it would be quite interesting to know how the inclusive growth strategy adopted by the country in the last decade could be able to improve the socioeconomic condition of these tea garden labourers. Accordingly, a case study has been undertaken in Salkathoni and Ghorajan T. E of Sapekhati development block of Charaideo district of Assam. Charaideo district is an ideal district to study about the TGLs because the district has number of big Tea Estates and accordingly has significant portion of Tea tribe population.

Inclusive growth and its dimensions is not an easy task at all. Out of the several indicators of inclusive growth, monthly per capita expenditure on foods and services of TGL households has been used as a proxy indicator of economic wellbeing and three welfare schemes- MGNREGA, PDS and SHG-BLP have been selected to evaluate their impact on economic wellbeing. Among these three schemes MGNREGA and PDS have been found effective for economic upliftment in terms of having association with monthly per capita expenditure of sample households. However SHG movement have been found statistically insignificant. This can be understood from the fact that few households (12% of the total sample households) have membership in SHG and further majority of the members are using SHG for taking credit rather than an income generating unit.

### **Linking Social Protection and Inclusion: A Citation Analysis from 2000-2021**

**Shalini Garg**, Professor, Guru Gobind Singh Indraprastha University, New Delhi

**Snehlata Sangwan**, Research Scholar, Guru Gobind Singh Indraprastha University, New Delhi

The objective of this paper is to highlight several research studies in the subject of social protection and workplace inclusion. This allows us to better understand the connections between social protection and inclusion, as well as highlight research gaps. The methodology used is Citation analysis. The paper examines the citation index of journals and contributors using data from several repositories such as SSCI, ESCI, and SCImago (2000 to 2021). Journals and papers linked to social protection were selected from a database of 3, 42,818 publications for the analysis.

A study of literature was undertaken from 2000 to 2021 with emphasis on social protection and inclusion, as well as research trends. Because the phrases “social protection” and “inclusion” have multiple meanings and interpretations, the literature on social protection and inclusion was used to gain a more nuanced grasp of their meanings and conceptualizations. According to the findings of this study, there is substantial amount of research in the field of social protection and its antecedents. Although inclusion is a relatively new topic of investigation, additional study in the area of inclusion and social protection is necessary.

The study is unique and significant since the term “inclusion” has just lately entered public discourse. Furthermore, research researchers, academics, and practitioners interested in learning about research trends and developing trends in the field of social work may find this study useful.



**TECHNICAL SESSION  
(BRIEF PRESENTATIONS-4)**



## Employment-Unemployment Conundrum of Social Groups in India

**Manjit Sharma**, Assistant Professor, DAV College, Sector-10, Chandigarh, Chandigarh

**Pushpak Sharma**, Research Scholar, Department of Economics, Panjab University, Punjab

**Kulwinder Singh**, Assistant Professor, University Business School, Panjab University, Punjab

**Jatinder Singh**, Assistant Professor, Centre for Research in Rural and Industrial Development (CRRID), Chandigarh

The social laws that regulate a given division of labour in the form of caste system are ordained by those social classes or groups which control material and mental means of production. In this context, the present study tries to examine the level of unemployment among the different social groups in India using on the latest NSS unit level data on 'Periodic Labour Force Survey, 2017-18'. The tabulation of data has been done to show the change in the pattern of employment and unemployment from 1999-2000 to 2017-18. Social group disparities are the result of historically rooted 'social disadvantages' for scheduled castes and scheduled tribes, by way of social exclusion and physical exclusion, which continues to operate in contemporary times. The Indian labour market is dominated by the self-employed (52 percent) followed by casual workers (25 percent) and regular workers (23 percent). The analysis reveals that the share of self-employed and regular workers remained the highest for workers from 'Others' category. A high proportion of workers indulged in casual work in Schedule Caste groups (41.2 percent), followed by Scheduled Tribes (31 percent), and Other Backward Classes (23 percent).

It is interesting to see that most of the illiterate workforce is engaged in work as own account workers and casual workers which require less education and skills. Further, higher unemployment rate has been found in educated and young labour force. One of the reasons for higher unemployment rate among the educated in contrast to the uneducated is that the educated do not take up informal jobs such as own account work, casual wage labour, helper in household enterprises, and so on.

Further, the unemployment rates exhibit increase for all the social groups across all age groups. Importantly, the young age group (15-19 and 20-24) shows a higher unemployment rate in 2017-18 compared to 1999-2000. The rural unemployment across all social groups in young age group of 20-24 shows high unemployment (ST-8.1 percent, SC-9.4 percent, OBC-9.9 percent and Others-11.1 percent) in 2017-18. The urban unemployment for the same age group shows higher figures for socially disadvantage groups. The study finds that the unemployment rate is higher in urban areas as compared to rural areas. Our study clearly reveals that lack of employment generation capacity remains the major challenge for the economy. Hence, labour-intensive industries must be given subsidies and tax exemptions. The problem of 'missing half' is visible as female labour participation remained low across social groups. Female centric work units should be boosted to promote female work participation. The policy should be framed to increase the employment opportunities for female, educated and young labourers. Further, social security arrangements must be assured by the employer for the casual workers. The low earning self-employed should also be covered under social security schemes through various income guarantee and insurance schemes for all social groups.

## **Employability Skills Impact on Employment Levels of Polytechnic Students in Punjab**

**Manish Kumar**, Research Scholar, Punjabi University Patiala, Sas.Nagar, Punjab

**Jaswinder Brar**, Professor, Punjabi University Patiala, Punjab

Education is the most important tool in the hands of the people residing in any country to attain gainful employment. Employment generation in our country is quite low as comparison to other countries. In order to improve employment and generate income for the people, polytechnics institutions were set up. The employment generation of polytechnic institutes in India as well as Punjab was below the quality mark. We do not have significant amount of research available related to employability skills for the Polytechnique students of Punjab. This research work focuses on the employability skills required for the polytechnic students and their employment condition.

The research work comprises of analysing primary as well secondary data. A well-thought-out questionnaire was prepared, and data was collected from 80 Polytechnique pass out students that have studied in polytechnics of Punjab over the last five years in order to get data related to their current employment status and employability skills. The results were formulated using simple mathematical tools like percentages and averages.

The results show that there is lack of employability of skills among polytechnic students of Punjab. The important employability skills, which are lacking among the Polytechnique students, are practical training, communication skills, technical skills, theoretical knowledge, etc. The highest number of students responded that technical skills were lacking in them and lowest number of students responded for communication skills were lacking in them. The rate of hiring of polytechnic pass-outs was 35 percent in private sector, six percent in the government sector, 10 percent adjusted in self-owned jobs, 15 percent wanted to study further, and five percent are doing family business. The unemployed Polytechnique students, who are not further studying, are 28 percent and 12 percent of the students are getting the work but they are not ready to work at lower salaries. Most number of boys got the jobs from the mechanical engineering field, and most numbers of girls got jobs from architecture assistantship field.

This research concludes that employability skills are very important to get gainful employment in any field, especially for the students of Polytechnique colleges. These skills could be imparted through revising the curriculum at regular intervals according to the current needs of the society; teacher training should also be given importance; there should be close link between the polytechnic institutes and industries and students should visit the concerned industries at regular intervals. In the end, there is need to provide employability skills by the institutes, so that students can get jobs easily after completion of the course, for their adjustment in the current jobs and lately if they need to be able to change their jobs with ease. Public and private sector should make a joint effort to improve the level of employment status of polytechnic institutes of Punjab.

## Disability and Labour Market Participation: Evidence from the NSSO Surveys

**Amrita Roy**, Assistant Professor, IIT Palakkad, Kerala

**Anjuna T R**, Research Scholar, IIT Palakkad, Kerala

'Disability' is an umbrella term, covering impairments, activity limitations, and participation restrictions that limit an individual to lead a defined normal life. According to United Nations, Person with Disabilities (PwDs) are the world's largest minority comprising of 15% of the world's population and about 80% of them live in the developing countries. No doubt, they are the least-nourished, the least-healthy, the least-educated, and the least-employed. They have always been subject to discrimination, abandonment, exclusion, segregation, poverty, deprivation, charity and even pity. Thus, economic independence is necessary for them to ensure a dignified life. Labour market participation is the only way to attain economic independence for an individual. Labour market participation not only ensures economic inclusion but also advances both social and political inclusion which is very much necessary for the people with disabilities (PwDs).

Across the world, PwDs are disproportionately affected by negative labour market outcomes both in the developed and the developing countries. But there is not much clarity about the labour market outcomes of the PwDs in developing nations due to unavailability of data and lack of research regarding the disabled population, particularly regarding their labour market participation. This is especially true in the Indian context. Despite the existing various welfare policies, there are not many studies on the labour market experience of PwDs in India.

In this respect, it is relevant to examine the trends of labour market indicators of PwDs. Thus, this study has focused on the labour market participation of PwDs to understand trends in labour market indicators and to identify major determinants of labour market participation of PwDs in India. The study also examines the impact of disability on labour market participation in the Indian context. It analyses the trends in labour market indicators such as, Labour Force Participation Rate (LFPR), Worker Population Rate (WPR) and Unemployment Rate (UR) of disabled population, by examining unit level NSSO data from various rounds. It provides a comprehensive overview about the significant negative effects of disability on labour market outcomes. Particularly, we have identified the specific factors that complicate the participation of disabled population in the labour market. The 47<sup>th</sup>, 58<sup>th</sup> and 76<sup>th</sup> rounds of the NSSO data on "Survey of Person with Disabilities" has been used for the study. We have used both quantitative methods (analysis of labour market indicators) and qualitative response models (Probit model of labour market participation) for our study.

## **Informal Employment, Livelihoods and Spatial Logic of Labour: The Case of Artisanal Bangle Making in Firozabad**

**Anjali Mittal**, Asstt. Professor, School of Planning and Architecture, New Delhi

In the context of bangle industry in Firozabad (Uttar Pradesh) the present paper investigates the role of space in the formulation of perceptions about labour. It explores the relationship between an economic geography of production of towns and cities with artisanal industries and the resultant structuring of space in the context of economic development policies geared towards increasing participation in the global economy.

“Workers are not just historical agents but are also geographical ones and that their spatial embeddedness may be enabling and/or constraining their social praxis”. With this perspective, using the labour-geography framework, the paper aims to bring to focus the agency of labour and how labour shapes space and creates relationships with space within which labour is enacted. Accordingly, the paper seeks the spatial logic of labour. Does the positionality of labour in a specific space affect the conceptualisation of what labour is? Is labour primarily natural or social? Can the positionality of labour in a specific socio-spatial structure help question the agency of labour as formal and informal? How identity formation takes place around socio-spatial temporalities of livelihood systems in artisanal industries. These are certain central questions probed in the essay.

The discussion particularly focuses on the glass bangle industry of Firozabad as it's a combination of both industry-based work and home-based work. The organisational structure of the production process emerges as a network of small to large scale stages, spread across the fabric of the city with different spaces of production including different households of a community, where each household is responsible for the completion of an intricate job. In turn, these production networks represent the socio-cultural processes of these communities which have been passed through generations. Thus, they present a scenario of multiple layers of socio-economic -cultural-spatial complexities woven into one another and therefore, constituting an active field for research.

The paper engages a multifaceted ethnography of labour (spatial mapping, spatial ethnography, participant observation etc.) to see how those involved in the production process unpacks several binaries associated with labour, namely formality/ informality, workplace-home, craft-industry from a spatial perspective. The field work for this study was conducted during 2018 and subsequently in 2021. The exploratory research in 2018 mapped the movement of the product through the fabric of the city establishing the production networks. The second phase in 2021 included ethnographic work, spatial mapping and photographic documentation of household units within identified three production clusters to develop a more detailed and nuanced understanding of the work-live relationship and the production networks.

Eventually, the paper aims to present a case to emphasise the need for development policies for such artisanal clusters to be rooted in the spatial embeddedness of labour processes in particular geographic location in the context of economic development policies, geared towards their increasing participation in the global economy.

## **Impact of Labour Force on Economic Growth: A Panel Analysis from South Asian Countries**

**Abida Khatoon**, Research Associate, Banasthali Vidyapith, Niwai, Rajasthan

**Anoushka Singh**, Assistant Professor, Government PG College, Amarpatan, Satna, Madhya Pradesh

This paper studies the impact of the labour force on economic growth of three South Asian countries; Bangladesh, India and Pakistan by employing balanced panel data from 1991 to 2019. Fixed effects model (FEM) and random effects model (REM) are deployed to examine the impact of labour force participation rate on economic growth using variables of economic growth as a dependent variable, labour force participation rate and gross capital formation and trade openness are used as a controls variables in the study. The empirical regression analysis confirms a positive and significant impact of female labour force participation rate on economic growth in region. Equally, trade openness has a positive and significant impact on economic growth in the region. This study also indicates that male labour force participation rate and gross capital formation affecting economic growth positive but insignificantly

## **Gender Inequality in Employment Participation among Social Groups of India**

**Chinmayee Mohanty**, Independent Researcher, Jawaharlal Nehru University, New Delhi

The present paper focuses on the employment status of women in scheduled caste and tribe groups. Drawing from both empirical and statistical sources, the paper tries to focus on SCs and STs female work participation in the labour market by considering three annual periodic labour force survey (PLFS) i.e., 2017-18, 2018-19, and 2019-20 and highlights different dimensions and the trends of inclusion and exclusion in female employment. The age group 15 and above is taken for the study. The analysis has taken the female-male and rural-urban differences of these two groups in different sectors like agriculture, industry, and service sector and examine the gender gap in work participation. This paper has taken PLFS definition of workers and different sectors of industries. The study documents extreme degrees of gender inequality among the scheduled groups. Findings indicate that relative to men, women in these groups have far more limited access to employment resources. The study found that though SCs and STs Female's work participation has increased gradually in subsequent years, the gender disparity between male and female is very high. In rural and urban, female has low participation than male. If we see sector-wise such as agricultural, industry, and service, the same gender disparity has seen. In the three broad categories of employment statuses such as self-employment, regular wage, and casual labour, Women participation is high in self-employed occupation while they have low participation in regular wage and casual labour categories. The high participation in self-employed activity indicates that women are still far away from the mainstream occupation. Due to lack of opportunities to work as a regular wage, women prefer to work a helper in household enterprises and other self-help activities. This research also reflects on some policies and schemes of the government to reduce the disadvantage of scheduled group women.

## **Agriculture and Rural Labour Markets in India: A State-Level Analysis**

**Satheesha B**, Ph.D. Scholar, IIT Delhi, New Delhi

This paper examines the association between agricultural growth performances and changes in rural labour markets across Indian States between 2004-05 and 2017-18. The study is based on the secondary data drawn from NSSO and the Ministry of Agriculture and Farmers Welfare, Government of India. In rural India, agricultural and allied sectors continued to employ about 60 percent of the total workforce in 2017-18 (PLFS 2019). India's labour market witnessed a major structural change in the late 2000s with a faster decline in agricultural employment both in terms of relative share and absolute number. However, in some states such as Gujarat, Maharashtra, Chhattisgarh and Madhya Pradesh, the numbers of workers in agriculture registered an increase, particularly male workers. The existing literature identifies non-farm diversification, migration, urbanisation and social policy and welfare programmes as the possible reasons for the recent changes in the labour market in India. In this paper, we attempt to understand how agricultural growth performance influences the labour market changes in India.

The study finds that the important factors which influence the agricultural growth performance (yield) and labour use in agriculture (labour-land ratio) are, a) technology, b) agro-climatic conditions, and c) institutional factors such as agrarian structure and land tenure. In Punjab and Haryana, mechanisation of agricultural operations, land tenure system followed during the British rule, relatively larger size of landholding, and shift of workers away from agriculture are believed to have resulted in high yield and low labour absorption in agriculture despite these states cultivating labour-intensive crops such as paddy and wheat. In Tamil Nadu, the mechanisation of cultivation along with the faster movement of workers out of agriculture might have contributed to the faster decline in the labour-land ratio in agriculture, particularly after 2004-05.

Gujarat, Maharashtra, Chhattisgarh and Madhya Pradesh registered a faster yield and output growth in agriculture in the late 2000s, and the growth was associated with a positive growth of male workers in agriculture. These states have had the advantage of absorbing more labour per unit of land productively in agriculture by increasing yield. In Gujarat, the faster output growth of cotton has been associated with higher labour use in cotton cultivation. If you look at the region-wise performance, the Saurashtra region of Gujarat, the central cotton[1] producing region in the state, has recorded the fastest growth in total male workers in agriculture. Similarly, in Madhya Pradesh, the high output growth in wheat mainly due to the rise in the gross cropped area has resulted in higher absorption of labour in cultivation, particularly in the Southern region of the state.

## **Labour Shortage in Labour Surplus Economy: Spatial and Seasonality in Surplus-Shortage Nexus: An Investigation of Nepal**

**Ishwor Adhikari**, Student, South Asian University, Delhi

Nepal is a classic case of surplus labour economy. Two-thirds of workforce are employed in agriculture contributing 23% to the GDP. Though the agricultural sector is supposed to be the largest pool of surplus labour, agrarian labour shortage has become a buzz word among media, analysts, and policymakers. Ample anecdotal but little solid evidence exist to buttress their worries. Despite documentation of labour shortage in Nepal's agriculture there are no hard statistics on labour shortage, and the inference of shortage is largely indirect.

To understand the agricultural labour problems in Nepal, the literature has oriented itself towards out-migration. Their queries range from how out-migration impacts agricultural production, to how out-migration has impacted the labour supply of the left-behind members in agriculture. Such analyses have largely been unable to unpack the labour market friction in the rural agrarian societies and gives us only a narrow idea of labour problems in Nepal's agriculture. They also ignore the spatial components, seasonality in agriculture and spatial movement of labour to adjust the labour demand and supply.

Labour shortage can arise not only because there is no labour available but also because labour market is very local. There can be pockets where there is surplus labour, while there is labour shortage in another. One of the interesting observations I made during small field visit is that despite nearby villages, in Terai, not all of them have peak seasons at the same time due to different varieties of rice they plant owing to differences in access to irrigation. They can trade labour in need to adjust net demand-supply.

When two close villages do not (cannot) trade labour in need, there can have both a surplus and shortage situation. Seasonality and friction in labour movement can lead us to spatial labour shortage despite excess labour in the economy in general.

This paper uses the separation hypothesis and framework. Using a first difference regression and exploiting the asymmetric response of household labour endowment on labour demand under two different labour market constraints (i.e. labour demand constraint and labour supply constraint), we are able to show that, a) the economy has surplus labour at large, b) despite surplus labour at large, there is spatial and seasonal labour shortage, and c) communities where temporary immigrant workers are available they do not suffer from labour shortage, or the problem becomes less intense.

## **Work and its Prospects: Impact of Covid-19 on Women Home-Based Workers in South Asia, 2022**

**Shalini Kala**, Researcher, South Asian University, New Delhi

**Navya D'souza**, South Asian University, New Delhi

Although they remain largely invisible, home-based workers are engaged in several branches of industry and many are integrated into both domestic and global supply chains such as those related to garments, textiles, food and handicrafts. They represent a significant share of employment – almost all informal in nature –

particularly for women and especially in South Asia. Between mid-2020 and mid-2021 HomeNet South Asia investigated the impact of the COVID-19 pandemic [1] on these women across twelve locations in seven countries of the region. During the study period, movement restrictions imposed in response to the multiple waves of infection, severely curtailed work opportunities across all survey locations and for over 70 percent, recovery is still not perceptible. Average work-days per week slumped to less than 30 percent of the pre-COVID level during the peak lockdown period of April-May 2020 and had not stabilised till mid-2021 when they were reported at 44 percent after increasing to 55 percent in mid-2020.

Loss of savings and assets along with accumulation of large unpaid borrowing resulting from the need to cover basic survival, could be a critical barrier to recovery in future for this vulnerable group. The paper recommends immediate support for women HBWs to cover essential expenses, pay off debts, and secure working capital. In addition, it recommends work-generation initiatives including support to women HBW's collectives that helped somewhat cushion the drastic drop in work availability and design of policies to address the specific needs of women HBWs.

### **The Inexplicable Fall in Female Labour Force Participation in Select Metropolitan Cities of India**

**Diya Devare**, Assistant Professor, Symbiosis College of Arts and Commerce, Pune, Maharashtra

Though the Covid 19 pandemic presaged employment challenges for females, the participation of females has already witnessed a downward trend in metropolitan regions in India. The labour force participation of females has been constantly affected by a trade-off between work and home requirements. The Global Gender Gap Index (GGGI), 2021 published by the World Economic Forum (WEF) highlights that the inherent gender gaps coupled with pandemic has escalated the gender gap crisis asymmetry between men and women. India's Global Gender Gap Index ranking is 140<sup>th</sup> out of total 156 countries which is one of the lowest as compared to other South Asian countries. Recent literature on Female Labour Force Participation Rate (FLFPR) in India concentrates principally on participation rates in rural areas as a downswing in the F-LFPR is much more pronounced compared to the urban participation rates. This paper mainly focuses on the factors deterring females from participation in the labour force, specifically in the metropolitan regions of India using the Indian Human Development Survey (IHDS) panel data IHDS I Survey (2005-06) and IHDS Survey II (2011-12). The main findings reveal that demographic factors such as marital status, own education, spousal education, religion and household income play a pivotal role in the employment status of females.

### **Women Micro Entrepreneurship and Role of Informal Credit: A Case Study of Selected Districts in West Bengal**

**Nabanita De**, Research Scholar, Rabindra Bharati University, Kolkata, Kolkata, West Bengal

The issue of "Women entrepreneurship" is a social process, already gained importance across the globe and also in India it became prominent since the latter half of the eighties. Accessing informal credit by women entrepreneurs' is considered substitute as well as complementary for micro & small

entrepreneurship development in West Bengal (WB). Extant literature have shown that women micro-entrepreneurs were unable to access formal credit facilities due to lack of collateral securities (do not inherit any wealth), social status, supply side bottlenecks, bank managers attitudes etc. Hence, the cohort has to rely upon easy access of loan from regional money lenders, friends, relatives, community groups, SHGs. In this regard they are compelled to pay high interest rate, bear several social and psychological harassments. The absence of financial inclusion is hindering the social justice. This empirical study of selected districts, particularly rural and semi-urban areas of North and South 24 -parganas, Birbhum shows that some successful women micro-entrepreneurs access the financial resources informally generate their income, livelihoods and also providing potential employment among young poor male and female as well as wage labourers, distressed and marginalized women. These women entrepreneurs are in need of financial inclusion and social justice for being catalyst of socio-economic development.

The women's participation in small businesses and building micro-entrepreneurship in selected districts of West Bengal mainly rural and semi-urban areas of South 24 parganas, North 24 parganas and Birbhum during the period of March 2019 to January 2020. The primary survey were basically questionnaire based during that period. The questionnaire was basically in the form of a face-to-face interview that was administered to 200 women led- micro- enterprises and small businesses. The face-to-face interview was essential due to the low literacy levels of most of the respondents but also because of the sensitivity of the subject matter under investigation. The questionnaire explored family background, economic status, attitudes, characteristics of them, the socio- business environment, fears and the nature of their concerns. The sample design was purposive sampling, with convenience sampling at the local level.

In these districts we have found some challenges and opportunities that most of women micro entrepreneurs have faced. These are: a) It is hard to obtain the real value of entrepreneurship. b) Low financial literacy. Most of them are not aware of business risks and uncertainty. c) More sophisticated technologies such as asset-based lending, debtor finance are not understood by the respondents. d) In the districts most Entrepreneurs are motivated more by a need for self-realization and personal development than by material considerations, though the latter become more important as the business creation process advances. e) Lack of digital literacy due to lack of proper educational background and family support. f) Women entrepreneurs reluctant to approach formal institutions. In fact, only 9% cent of surveyed women entrepreneurs sought help from business mentors, and only five per cent sought institutional support. g) Co-signature requirements from husbands or male family members. h) Discriminatory inheritance practices. i) Limited awareness amongst women regarding credit and support programmes. j) Loan money is used generally by male family members and loans must be taken in the name of wife. k) Many of the women entrepreneurs who had sought financing described the application process as overly complex, cumbersome and restrictive. l) Women entrepreneurs are also less likely than their male counterparts to have a history of interaction with formal financial systems. m) Interviewees in these regions that indicated finance as the second greatest challenge faced in sustaining or expanding their business, yet repeated their desire to avoid financial risk. Aversion to debt may be related to the social stigma that is attached to bankruptcy. n) Panchayat heads and other political heads have also played an important role for getting formal loans, thus poor women were mostly avoiding them.

The inevitability of informal credit for business set up and expansion, desirability for financial inclusion and social justice through formal credit accessibility are primary underpinnings of the study. Despite the vast economic power and presence, women micro – entrepreneurs particularly those from underrepresented and marginalized groups – are historically underfunded, earn but a share of revenues as compared to male-owned firms, and face barriers throughout the business development lifecycle. Aspiring women entrepreneurs who are members of underrepresented groups face even greater challenges that both discourage business development and marginalize growth and opportunity. The disparities between women- and male-owned businesses can be attributed to various factors, including business characteristics and business owners' goals and are compounded by issues of gender and race-based discrimination. This discrimination is hampering inclusive growth and justice and also destroying the social and economic sustainability. Thus entrepreneurial ecosystem is not maintained.

### **Mapping Child Labour in Global Value Chain of Textile Industry in West Bengal**

**Sumana Lahiri**, Research Scholar, Pandit Deendayal Energy University, Gandhinagar, Gujarat

**Nausheen Nizami**, Associate Professor, Pandit Deendayal Energy University, Gandhinagar, Gujarat

Child labour is forbidden by law in most countries including India. In the quest to abolish child labour globally, the Sustainable Development Goals (SDG) of the United Nations have proposed initiatives to abolish child labour under the 8<sup>th</sup> Goal (SDG 8.7). It proposes taking immediate and effective measures to eradicate forced labour, end modern slavery and human trafficking, and secure the prohibition and elimination of the worst forms of child labour, including recruitment and use of child soldiers. By 2025, child labour in all its forms is to stop. Also, the 16<sup>th</sup> Goal (SDG 16.2: End abuse, exploitation, trafficking and all forms of violence and torture against children) is to be achieved. The global value chain (GVC) provides a strong framework to analyse the production and distribution of textile products. This paper attempts to study the GVC of the textile industry and household enterprises involving child labour in West Bengal within and beyond the nation. In a sense, home enterprises are adding to the industry; firstly, in terms of individual production and distribution, and secondly, to the leading brands that manage dispersed global value chains. It shows the labour processes involved in production across various regions and distribution of products locally and globally. It explains the untold story of the expansion of home enterprises involving child labour other than their employment in the industry to produce apparel across markets. The children are the factors of production and are socially embedded in the household. It brings forth social, economic, cultural conditions, etc., of child labourers and their households. It draws a qualitative field research with the households involving child labour in the labour processes directly or in its allied activities, child labourers in the textile industry, government officials in the textile department, and local associations engaged in the textile industry. It also draws data from government reports, research papers, civil society reports, etc., for further analyses. The study suggests improvement in the standards of the labour process and the level of skills necessary to market the product, all aimed at abolishing child labour. It concludes with promising strategies that the government, industry, and households can undertake for abolishing child labourers.

## **Economic Status of Rural Labour and Marginal Farmer Households in Border Area of Punjab: A Comparison from Amritsar District**

**Skattar Singh**, Research Scholar, Guru Nanak Dev University Amritsar, Amritsar, Punjab

**Kuldeep Kaur**, Professor, Guru Nanak Dev University Amritsar, Amritsar, Punjab

The New Agriculture Strategy brought a remarkable change in the production, productivity and yield of crops in Punjab. After 1980s, it became slower over time. Punjab being a pioneer in Green Revolution, is no more booming in agriculture; it is facing an economic crisis. After the 1970s, several research studies on farmers and agriculture labour had been conducted, but majority of them bypassed the Border Districts of Punjab. Six districts of Punjab have been sharing 554 km international boundary with Pakistan. This study had been conducted to analyse the level, pattern, and per capita income of marginal farmers and rural labour households in the border districts of Punjab. Out of the total 22 districts of Punjab, six districts (Pathankot, Gurdaspur, Amritsar, Tarn Taran, Gurdaspur and Fazilka) share boundary with Pakistan. Punjab is divided in to three main regions, i.e., Majha, Malwa and Doaba region. For the study purpose, Majha and Malwa regions have been selected because the Doaba region is a bit far from the Pakistan's boundary. A multistage convenient sampling technique had been used to select the ultimate respondents. The district being sample unit at the first stage, all border blocks as unit at the second stage, villages being at the third stage and only rural labour households and marginal farmers are the sample unit at the fourth stage. For the study, Amritsar District has been selected. From this district all the development blocks (situated within 15 kilometres from boundary line as per the guidelines of Border Area Development Programme) had been selected. The selected blocks from Amritsar district are, Ajnala, Chugawa, Attari, and Harsha Chhina. From each block, one village had been selected randomly (four villages). From each village, 10 percent houses had been selected as respondents. The total sample consists of 156 respondents, out of which 92 households are from rural labour households and 64 from marginal farmers. A pre-prepared questionnaire had been used for the personal interview of each of the respondents.

The Average annual income of marginal farmers is Rs. 191,004.57 and of rural labour households is Rs. 70,083.43 in the Amritsar district of Punjab. The average consumption of 30 days of marginal farmers and rural labour households is Rs. 182,140.89 and 104,498.2 respectively. Out of total consumption among marginal farmers and rural labour households, the maximum amount is spent on non-durable goods, followed by services, durable goods and socio-religious ceremonies. The total amount of debt on both marginal farmers and rural labour households is Rs. 271,609.6 and 75,493.08, respectively. The marginal farmers get the maximum loan amount from institutional sources because they have land as collateral. The rural labour households got the maximum amount of debt from non-institutional sources because they lack the collateral securities and pay a higher rate of interest to the lenders. From the analysis, the fact is clear that marginal farmers and rural labour households spend maximum amounts of borrowed moneys on productive purposes. Thus, among them, out of a total debt of Rs.271,609.6, Rs. 239,250.02 was found to be spent on productive purposes, and 32,359.58 on non-productive purposes. The rural labour households spent Rs. 605,28.25 on productive purposes and Rs. 149,64.83 on non-productive purposes.

The difference between the incomes of marginal farmers and rural labour households was found to be 57.48 percent, hence there is a need to generate more employment opportunities for rural labour households. The marginal farmers mainly depend on cultivation of wheat and rice, pointing out to the fact that there is need for promotion of allied activities such as dairy farming, horticulture, apiary farming, mushroom farming, pig farming, poultry and fish farming etc. The average annual income of rural labour households from MGNREGA is just Rs. 870.37, too low. There is need to implement MGNREGA properly and with a minimum of 150 days, and there is also need to increase wages under MGNREGA to about Rs. 300 per day. Among the marginal farmers, the maximum consumption expenditure is on non-durable goods and services.

There is a need to provide more quantity of wheat at the subsidised rate under the Public Distribution System, and decrease the price of power per unit for domestic use. The rural labour households spend the maximum amount on milk and wheat. For the rural labour households, there is a need for the subsidised amount of rice, tea leaves, wheat and other necessities under the Public Distribution System. For the rural labour households, there is a need of provision of institutional sources for the debt and credit at a subsidised rate. On the other hand, for the marginal farmers, there is need to increase the limit of debt per acre from co-operative societies, because co-operative societies are charging a subsidised rate of interest.

### **The Impact of COVID-19 Lockdown on Employment and Livelihood of Fishermen in Malappuram District, Kerala**

**Ubaish Mon**, Research Scholar, Department of Economics, Pondicherry University, Puducherry

**V. Nirmala Professor**, Department of Economics, Pondicherry University, Puducherry

The paper examines the impact of Covid-19 lockdown on employment and livelihoods of marine fishermen in Malappuram district of Kerala. Using a random sampling approach, primary data were collected for the study from 100 fishermen working at Parappanangadi and Ponnani landing centres of the district, through the period December 2016 and April-May 2021. The imposition of the Covid pandemic lockdown by the government left all the fishermen unemployed. While fishing was their primary occupation during the pre-lockdown period, the number declined in the lockdown relaxation period, with a few taking up temporary alternative employment. The fishermen experienced significant loss in monthly income, hours worked per-day and savings in the lockdown relaxation period, compared to the pre-Covid period. As a coping mechanism during the lockdown period, a vast majority depended on institutional help (government and community/private), besides cutting down household expenditure. The other strategies resorted to were: using up savings, borrowings from various sources, and pledging/selling jewels, land, durables, and fishing equipment and craft ownership share. The household budget was also adversely affected. Although these effects were partially mitigated by the government, fisheries institutions, and community and private assistance, they were insufficient to recover the economic loss suffered by the fisher households during the COVID lockdown and its relaxation periods.

## **India's Emerging Mall Culture: A Study of Employment Challenges behind the Glittering Facade among Married Working Women of Patna's Mall**

**Vijyeta Kumari**, Research Scholar, Department of Sociological Studies Central University of South Bihar, Bihar

Globalization has resulted in new market structures such as supermarkets, departmental stores, hypermarkets, specialty shops, and malls. The concept of a shopping mall is a common place where many shops are located. While every shopping mall has one or more anchor stores, the retailers within each mall differ quite a bit. For modern retailing to thrive, employees must be creative, good communicators, and interpersonally skilled. Women are considered more suitable for certain roles in retail because of their ability to be pleasant and patient with customers. Due to their capacity to provide emotional labour, women are considered to be an ideal choice for shopping mall jobs. Food and grocery products, cosmetics, kids' jewelry, and home decor and apparel are among the products that women employees prefer the smiling list of the customers and their income improves their social standing. However, many of these individuals find the work challenging. Therefore, the present study was conducted to understand the economic profile and employment challenges of married working women in shopping malls in Patna. The study was conducted at shopping malls in Patna, and it was found that shopping malls provide women with new opportunities for employment. Apart from these opportunities they also face many challenges in economic as well as professional life. They are employed as sales officers, saleswomen's, security guards and sweepers in malls. Most of the women employees were in between 18 to 35 years age, and they were educated up to 10+2 level, graduate level, and some of them even hold postgraduate degrees. Despite operating in large cities, shopping malls do not pay their employees a handsome salary in accordance to their working hours and hard work and do not provide a conducive environment for their well-being during both menstruation and pregnancy.

## **Labor Exploitation and Capitalism: A Systematic Literature Review**

**Ateeqa Ansari**, PhD, LNMIIIT, Jaipur, Rajasthan

**Ilma Rizvi**, Research Scholar, Jamia Millia Islamia University, New Delhi

Economic growth refers to the increase in production of goods and services in an economy with special consideration of domestic territory. Capitalism in an economy prevails with the thought of profit maximizing. In this market, capital assets like factories, mining projects, and petroleum projects are privately owned and controlled and labor is purchased through money wages. This is where the exploitation process starts. The objective of this research is to examine the affect of labor exploitation and capitalism on the level of job satisfaction and quality of life. Systematic review inclusive of quantitative and qualitative studies were undertaken. Literature search was done using SAGE, Google Scholar, PsycINFO and target keywords were identified in title, abstract and method. Using the PRISMA framework, the literature was included, excluded, reviewed and analyzed. Further this paper also discusses some suggestive points directing towards betterment of the migrant workers lives.

## **Classified-Mystified Process of Classification and Erasure of Specificity of Women Waste-Workers**

**Rohini Tyagi**, Research Scholar, University of Delhi, Delhi

This study is an inquiry into the work of waste-workers engaged in the informal waste-recovery sector of Delhi. In this study 'work' is the central category, as in the prevailing system of capitalism, life itself depends on doing work, especially for the precarious labour force that is our subject. This is demonstrated with the help of two cyclical models developed in this study that reflects a perpetual process of exploitation which reproduces itself via work and work organization. This is demonstrated with the help of a cyclical model developed in this study that reflects a perpetual process of exploitation which reproduces itself via work and work organization and how it intensify in case of women waste-workers who bear double burden via Social Reproduction. The question, paper deals with, pertains as to why women workers have a major presence in sorting work which fetches lower wages, while most men perform at higher waged labour waste-picking in the value chain. This question is analysed through the gendered processes of classification which reproduce women as subordinate workers in the labour market. The analysis of the field work data of women and men workers showed that women entered sorting work under the constraints of time and mobility, the consequent demands on the reproduction of life through housework and the irregular hours "available" for other work. Women are constrained in their hours for wage work to realise the full potential of their labour for the market, leading to a lowering of earnings and double-burden (and sometimes triple-burden) of work. This study conducted semi-structure interviews pertaining to workers' perception of their work, living and detailing of women's daily work and routine of doing these tasks as well as their perception around it. The data was analysed using Marxist-Feminist framework and Social Reproduction Theory.

## **Dalit Women Workers and their Social Protection Needs**

**Divya Mishra**, Research Intern, Institute for Human Development, Delhi

Dalit women workers who carry the burden of rural areas on their backs are exploited many times more than men and remain poor despite working very long. This research confirms the endless stories of exploitation of Dalit women workers.

The research found that due to the lack of land of their own, the Dalit community has no means of even fodder for the animals and they are required to work in the fields of the landlords. Otherwise, the income generated by selling their milk is also forfeited.

The caste equations are clearly visible in the division of women's work. Working in the fields is considered below dignity by the women of the upper caste people in the rural areas is quite common for Dalit women to leave their homes and work in the fields. Dalit women are paid low wages for their labour. In many cases they are also victims of sexual harassment. There is no doubt that Dalit Women are among the most exploited in the Indian society.

## **Socio-Economic Impact of Circular Migration: A Case Study of Bihar**

**Ajeet Kumar**, Research Scholar, Department of Economics, Veer Kunwar Singh University, Ara, Bihar

Migration is an intrinsic part of process of development. It shows a dynamic link between both area of origin and destination. In particular, circular migration remains poorly captured as circular migrants move back and forth between source and destination regions. Generally, it is to be believed that only those people opting for circular migration who have a very strong bonding with their native place and this bonding has some social significance as well as economic impact. In this regard, the present paper would like to focus on circular migration or temporary migration which is part of this type of migration decision, when people decide to move only for a specific period of time and then again come back to their native place when situation improves. So, the study needs to capture the circular migration especially in backward state of Bihar. Based on the regional language within the Bihar, the study covers three districts i.e. Madhubani, Rohtas and Nalanda districts for the analysis. Using the sample size of 300 respondents, study found that there are the push factors such as poverty, poor education, crop failure, floods, drought, poor health care, over population that force people to leave their own origin and there are pull factors such as potential for employment, greater wealth, better service provision and many more factors which pull migrants towards their new destination. Focusing on migrant's location, work, employment, income, housing, and access to basic services at destination, the study finds the socio-economic impact and pattern of circular migration in Bihar and in turn, the migration crisis that emerged as a result of the economic shock during the COVID 19 pandemic. It provides a comparative and historical perspective of the conditions of migrant workers. And also, immediate social protection measures, policies need to address the deep-rooted barriers that keep migrants vulnerable.

## **The Flawed Condition of Daily Wages Labour in India during Covid -19**

**Prakarsh Soni**, Student, University of Rajasthan, Rajasthan

**Paresh Harsh**, Student, University of Rajasthan, Rajasthan

Since its discovery in December of 2019 in Wuhan, China, the Severe Acute Respiratory Syndrome Coronavirus-2 (SARS-CoV-2) has affected hundreds of millions people worldwide, resulting in complications that led to the death of over six million people, with the tolls still increasing. Due to the pandemic, almost all countries employed nationwide lockdowns and imposed severe restrictions to abstain from, and minimize avoidable human interactions to forestall the spread of the disease. This paper aimed at examining the levels of stress, anxiety, and depression among daily wage workers

during the pandemic, a neglected population. The study focused on 146 daily wage workers from various villages in the Jaunpur and the Bhadohi districts of Uttar Pradesh, India, among which, 135 were males and 11 females. The data was collected using the DASS-21 scale and the scoring was done as per the manual. The study concluded that female workers were highly affected in areas of stress, anxiety, and depression at the time of COVID-19 when compared to their male counterparts, among which, the early adulthood population workers were more affected than the middle-aged group. The mean score of early adulthood workers in areas of stress, anxiety, and depression was calculated to be 65.26%, 69.81%, and 61.97 respectively, whereas the combined mean score of middle-age workers was found out to be 66.29%, 64.50%, and 75.73%, comparatively lower than early adulthood workers, except in the domain of depression. The mean score of the combined male population is was 72.35%, 72.47%, and 73.32%, respectively. However, the score of the female population in all three domains was 87.59%, 86.14%, and 75.73%, respectively, indicating their higher proneness to mental health as compared than male workers.

### **Trends in Informal Employment in India**

**Adwitiya Mishra**, PhD Scholar, Centre for the Study of Regional Development, Jawaharlal Nehru University, New Delhi

Informality is a defining feature of the Indian economy. Much of the discourse around informality in employment is limited to the dichotomy between organized and unorganized sector workers. However, informality in employment is complex and multi-faceted. Using unit level data from various rounds of the National Sample Survey Employment and Unemployment rounds and the subsequent periodic Labour force surveys, this study disaggregates informal employment into two separate forms namely, informal employment in the informal sector and informal employment in the formal sector and provides a comparative analysis of the same with trends in formal employment. Furthermore, the study also examines trends in informal employment within the manufacturing sector. The study finds that there has been a decline in the share of Informal workers engaged in informal sector in total employment, however, this has been accompanied by an increasing share of informal workers engaged in formal sector as well. Within manufacturing, the persistence of dualism continues to account for the disproportionate share of employment of workers in low yielding and precarious jobs in the informal sector.